ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Governmnet of Karnataka

KRS Dam

ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ

ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಸಂಪುಟ 4ರ ಭಾಗವಾಗಿ
ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖಾ ನಿರ್ದಿಷ್ಟ ಐಟಂಗಳ ದರಪಟ್ಟಿ
2021-22

Water Resources Department

Schedule of Rates of Water Resources Department
Specific Items as part of Volume IV of Uniform Common SR
2021-22

Tribute

M. Visvesvaraya

1861 - 1962

Sayings of Sir M.Visvesvaraya

- *It is better to Work out than Rust out.*
- *Every man who has become great owes achievement to incessant toil.*
- *An Engineer is a person who applies the skills and Knowledge of basic Science for the good of society.*
- *If you do not work, neither shall you eat – a slogan in the West.*

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯಃ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಲು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು (Technical working group) ರಚಿಸುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖಃ (1) ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ : 65 ಆರ್.ಡಿ.ಎಫ್.2018 ದಿನಾಂಕ 04.04.2019

(2) ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ : 65 ಆರ್.ಡಿ.ಎಫ್. 2018 ದಿನಾಂಕ 04.04.2019

(3) ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳ ತಯಾರಿಕೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, (ವೆಚ್ಚ), ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ದಿನಾಂಕ 05.02.2020 ರಂದು ಜರುಗಿದ 2ನೇ ಪ್ರಗತಿ ಪರಿಶೀಲನಾ ಸಭೆಯ ನಡವಳಿಗಳು.

ಪ್ರಸ್ತಾವನೆ :

ಮೇಲೆ (1)ರಲ್ಲಿ ಓದಲಾದ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಅನುಸೂಚಿ ದರಗಳನ್ನು ಪ್ರಕಟಿಸಲು ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ಅನುಸೂಚಿ ದರಗಳ ತಯಾರಿಸುವ ಕಾರ್ಯವನ್ನು ದಿನಾಂಕಃ 01.06.2019ರ ಮುನ್ನ ಅಂತಿಮಗೊಳಿಸಿ ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿಯ ಅನುಮೋದನೆ ಪಡೆದು ಜಾರಿಗೊಳಿಸಲು ಕ್ರಮವಹಿಸುವುದೆಂದು ಆದೇಶಿಸಲಾಗಿದೆ. ಮೇಲೆ (2)ರಲ್ಲಿ ಓದಲಾದ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಅನುಸೂಚಿ ದರಗಳನ್ನು ಪ್ರಕಟಿಸಲು ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ಸಮಿತಿಯು ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯು ತಯಾರಿಸುವ ದರ ಪಟ್ಟಿಯನ್ನು ಪರಿಶೀಲಿಸಿ ದಿನಾಂಕಃ01.06.2019 ರಿಂದ ಕಡ್ಡಾಯವಾಗಿ ಜಾರಿಗೊಳಿಸಲು ಕ್ರಮವಹಿಸುವುದೆಂದು ಆದೇಶವನ್ನು ಹೊರಡಿಸಲಾಗಿದೆ.

ಮೇಲ್ಕಂಡ ಸರ್ಕಾರದ ಆದೇಶಗಳಲ್ಲಿ ಆದೇಶಿಸಿದಂತೆ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ ಕೂಡಲೇ ಕ್ರಮವಹಿಸಬೇಕಾಗಿರುವ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಮೇಲೆ ಓದಲಾದ ಸಭಾ ನಡವಳಿಗಳಲ್ಲಿ ತೀರ್ಮಾನಿಸಿದಂತೆ ಈ ಕೆಳಕಂಡ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಲು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು (Technical working group) ರಚಿಸಲು ಕೆಳಕಂಡಂತೆ ಆದೇಶ ಹೊರಡಿಸಲಾಗಿದೆ.

ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ : ಆಇ 259 ಆಕೋ–2/2018 ದಿನಾಂಕ :17.02.2020

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಲಾದ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ಆದೇಶಿಸಿದೆ.

ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡ
(Technical working group)

ಕ್ರ.ಸಂ.	ಪರಿಣಿತರ ಹೆಸರು ಮತ್ತು ಪ್ರತಿನಿಧಿಸುವ ಇಲಾಖೆ	
1	ಶ್ರೀ ಆರ್. ಜೈಪ್ರಸಾದ್, ನಿವೃತ್ತ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್	ಅಧ್ಯಕ್ಷರು
2	ಶ್ರೀ ಸಿ. ಅನಂತರಾಮು, ನಿವೃತ್ತ ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ	ಸದಸ್ಯರು
3	ಶ್ರೀ ಗೋಪಿನಾಥ್, ನಿವೃತ್ತ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ	ಸದಸ್ಯರು
4	ಶ್ರೀ ರವಿಕುಮಾರ್, ನಿವೃತ್ತ ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ	ಸದಸ್ಯರು
5	ಶ್ರೀ ರವಿಕುಮಾರ, ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್ (ನಿವೃತ್ತ), ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ	ಸದಸ್ಯರು
6	ಶ್ರೀಮತಿ ಮೈತ್ರಿ ಎಸ್.ಕೆ. ಡೆಪ್ಯೂಟಿ ಜನರಲ್ ಮ್ಯಾನೇಜರ್, BESCOM ಶ್ರೀ ಆನಂದ ಆರ್. ಕುಲಕರ್ಣಿ, ಅಸಿಸ್ಟೆಂಟ್ ಜನರಲ್ ಮ್ಯಾನೇಜರ್, BESCOM ಇಂಧನ ಇಲಾಖೆ	ಸದಸ್ಯರು
7	ಶ್ರೀ ಡಿ. ದೇವರಾಜ, ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ (ನಿವೃತ್ತ), ಅರಣ್ಯ ಇಲಾಖೆ	ಸದಸ್ಯರು
8	ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು, ಲೋಕೋಪಯೋಗಿ ವೃತ್ತ, ಬೆಂಗಳೂರು	ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ/ಸಮನ್ವಯಾಧಿಕಾರಿ

i. ಈ ತಂಡವು ಕೂಡಲೇ ವಿವಿಧ ಇಲಾಖೆಗಳೊಂದಿಗೆ ಸಭೆಯನ್ನು ನಡೆಸಿ ಮಾರ್ಚ್–2020ರ ಮಾಹೆಯೊಳಗೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಿ ಸರ್ಕಾರಕ್ಕೆ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಸಲ್ಲಿಸುವುದು.

ii. ಪ್ರಸಕ್ತ ಇರುವ ದರಪಟ್ಟಿಯಲ್ಲಿನ Rate Analysis ಮತ್ತು Specification ಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ಸೂಕ್ತ ರೀತಿಯಲ್ಲಿ ವಿಶ್ಲೇಷಣೆ ಮಾಡಿ ಅದರಲ್ಲಿನ ಅಂಶಗಳನ್ನು/ಘಟಕಗಳನ್ನು (Components) ಪರಾಮರ್ಶಿಸಿ ಪುನರ್ ರಚಿಸಿ ಅದರ ಆಧಾರದ ಮೇಲೆ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳನ್ನು ತಯಾರಿಸುವುದು ಹಾಗೂ ಡೇಟಾ ವಿಶ್ಲೇಷಣೆಯನ್ನು ಪರಿಶೀಲಿಸಿ duplication of common item in different SRs ಗಳನ್ನು ಒಗ್ಗೂಡಿಸುವುದು. ಈ ನಿಟ್ಟಿನಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಪ್ರತ್ಯೇಕ ಎಸ್.ಆರ್. ಡೇಟಾವನ್ನು ತಂಡಕ್ಕೆ ಒದಗಿಸುವುದು ಹಾಗೂ ತಂಡವು ಬಯಸುವ ಮಾಹಿತಿಗಳನ್ನು ಒದಗಿಸಲು ಕ್ರಮವಹಿಸುವುದು. ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯಿಂದ ಈ ಕುರಿತು ಸೂಕ್ತ ಅಗತ್ಯ ಸೌಲಭ್ಯಗಳನ್ನು ಒದಗಿಸಿ ನಿಗದಿತ ಅವಧಿಯಲ್ಲಿ ಸದರಿ ದರಗಳನ್ನು ರಚನೆಯಾಗುವಂತೆ ನೋಡಿಕೊಳ್ಳುವುದು.

iii. ರಸ್ತೆ, ಸೇತುವೆ ಮತ್ತು ಕಟ್ಟಡ ಕಾಮಗಾರಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಇತರೆ ಇಲಾಖೆಗಳಲ್ಲಿ special items ಇದ್ದಲ್ಲಿ ಅಂತಹ ಐಟಂಗಳ ಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಿ, ಆರ್ಥಿಕ ಇಲಾಖೆಯು ರಚಿಸಿರುವ ಸಮಿತಿ ಮುಂದೆ ಮಂಡಿಸಲು ಕ್ರಮವಹಿಸುವುದು.

iv. ವಿವಿಧ ಇಲಾಖೆಗಳ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆ, ವಿಶಿಷ್ಟ ವಿವರಣೆ ಹಾಗೂ ಡೇಟಾ ವಿಶ್ಲೇಷಣೆ ಮುಂತಾದ ವಿವರಗಳನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆಗೆ ಸೃಜಿಸಿರುವ ತಾಂತ್ರಿಕ ತಂಡದೊಂದಿಗೆ ಹಂಚಿಕೊಳ್ಳುವುದು.

v. ಈ ಕುರಿತು ಕಾಲಕಾಲಕ್ಕೆ ಸರ್ಕಾರದಿಂದ ಮತ್ತು ಏಕರೂಪ ದರಗಳನ್ನು ರಚಿಸುವ ಸಂಬಂಧ ರಚಿಸಲಾಗಿರುವ ಸಮಿತಿ ನೀಡುವ ನಿರ್ದೇಶನದಂತೆ ಕಾರ್ಯನಿರ್ವಹಿಸುವುದು.

vi. ಮೇಲ್ಕಂಡ ತಂಡದ ಸದಸ್ಯರಿಗೆ ಸೇವಾ ಶುಲ್ಕವನ್ನು ನೀಡುವ ಕುರಿತಂತೆ ಸಮನ್ವಯಾಧಿಕಾರಿಯಾಗಿರುವ ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ವೃತ್ತ, ಬೆಂಗಳೂರು ಇವರು ಕ್ರಮವಹಿಸುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ
ಸಹಿ :-
(ಶ್ರೀಕೃಷ್ಣ ಎನ್. ಬುಗಟ್ಯಾಗೋಳ)
ವಿಶೇಷಾಧಿಕಾರಿ ಮತ್ತು ಪದನಿಮಿತ್ತ
ಸರ್ಕಾರದ ಜಂಟಿ ಕಾರ್ಯದರ್ಶಿ
ಆರ್ಥಿಕ ಇಲಾಖೆ
(ಲೋಕೋಪಯೋಗಿ ಆರ್ಥಿಕ ಕೋಶ)

ಇವರಿಗೆ :

1. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ, ಲೋಕೋಪಯೋಗಿ, ಬಂದರು ಮತ್ತು ಒಳನಾಡು ಜಲಸಾರಿಗೆ ಇಲಾಖೆ,
2. ಪ್ರಧಾನ ಮುಖ್ಯ ಅಭಿಯಂತರರು ಮತ್ತು ಮುಖ್ಯ ಯೋಜನಾಧಿಕಾರಿ, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಹೆದ್ದಾರಿ ಅಭಿವೃದ್ಧಿ ಯೋಜನೆ, ಕೆ.ಆರ್.ವೃತ್ತ, ಬೆಂಗಳೂರು
3. ಮುಖ್ಯ ಅಭಿಯಂತರರು, ಗ್ರಾಮೀಣ ನೀರು ಸರಬರಾಜು ಮತ್ತು ನೈರ್ಮಲ್ಯ, ಕಾವೇರಿ ಭವನ, ಬೆಂಗಳೂರು.
4. ನಿರ್ದೇಶಕರು, ತೋಟಗಾರಿಕೆ ಇಲಾಖೆ, ಲಾಲ್ ಬಾಗ್, ಬೆಂಗಳೂರು.

FOREWORD

Government in its order FD 259 F-2 2018 dated: 17-02-2020, have constituted Technical Working Group for preparation of Uniform SR/UNI SR/COMMON SR keeping in view the following (TOR):

i. ಈ ತಂಡವು ಕೊಡಲೇ ವಿವಿಧ ಇಲಾಖೆಗಳೊಂದಿಗೆ ಸಭೆಯನ್ನು ನಡೆಸಿ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಿ ಸರ್ಕಾರಕ್ಕೆ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಸಲ್ಲಿಸುವುದು.

ii. ಪ್ರಸಕ್ತ ಇರುವ ದರಪಟ್ಟಿಯಲ್ಲಿನ Rate Analysis ಮತ್ತು Specification ಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ಸೂಕ್ತ ರೀತಿಯಲ್ಲಿ ವಿಶ್ಲೇಷಣೆ ಮಾಡಿ ಅದರಲ್ಲಿನ ಅಂಶಗಳನ್ನು / ಘಟಕಗಳನ್ನು (Components) ಪರಮರ್ಶಿಸಿ ಪುನರ್ ರಚಿಸಿ ,ಅದರಆಧಾರದ ಮೇಲೆ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳನ್ನು ತಯಾರಿಸುವುದು ಹಾಗೂ ಡೇಟಾ ವಿಶ್ಲೇಷಣೆಯನ್ನು ಪರಿಶೀಲಿಸಿ, duplication of common item in different SR's ಗಳನ್ನು ಒಗ್ಗೂಡಿಸುವುದು. ಈ ನಿಟ್ಟಿನಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಪ್ರತ್ಯೇಕ ಎಸ್.ಆರ್. ಡೇಟಾವನ್ನು ತಂಡಕ್ಕೆ ಒದಗಿಸುವುದು ಹಾಗೂ ತಂಡವು ಬಯಸುವ ಮಾಹಿತಿಗಳನ್ನು ಒದಗಿಸಲು ಕ್ರಮ ವಹಿಸುವುದು. ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯಿಂದ ಈ ಕುರಿತು ಸೂಕ್ತ ಸೌಲಭ್ಯಗಳನ್ನು ಒದಗಿಸಿ ನಿಗದಿತ ಅವಧಿಯಲ್ಲಿ ಸದರಿ ದರಗಳನ್ನು ರಚನೆಯಾಗುವಂತೆ ನೋಡಿಕೊಳ್ಳುವುದು. ಸದರಿ ದರಗಳನ್ನು ಜಾರಿಗೆ ತರಲು ಎಲ್ಲಾ ಕ್ರಮಗಳನ್ನು ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯು ತೆಗೆದುಕೊಳ್ಳುವುದು.

iii. ರಸ್ತೆ, ಸೇತುವೆ ಮತ್ತುಕಟ್ಟಡ ಕಾಮಗಾರಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಇತರೆ ಇಲಾಖೆಗಳಲ್ಲಿ special items ಇದ್ದಲ್ಲಿಅಂತಹ ಐಟಂಗಳ ಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಿ, ಆರ್ಥಿಕ ಇಲಾಖೆಯು ರಚಿಸುವ ಸಮಿತಿ ಮುಂದೆ ಮಂಡಿಸಲು ಕ್ರಮವಹಿಸುವುದು.

iv. ವಿವಿಧ ಇಲಾಖೆಗಳ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆ, ವಿಶಿಷ್ಠ ವಿವರಣೆ ಹಾಗೂ ಡೇಟಾ ವಿಶ್ಲೇಷಣೆ ಮುಂತಾದ ವಿವರಗಳನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆಗೆ ಸೃಜಿಸಿರುವ ತಾಂತ್ರಿಕ ತಂಡದೊಂದಿಗೆ ಹಂಚಿಕೊಳ್ಳುವುದು.

v. ಈ ಕುರಿತು ಕಾಲಕಾಲಕ್ಕೆ ಸರ್ಕಾರದಿಂದ ಮತ್ತುಏಕರೂಪ ದರಗಳನ್ನು ರಚಿಸುವ ಸಂಬಂಧ ರಚಿಸಲಾಗಿರುವ ಸಮಿತಿ ನೀಡುವ ನಿದೇರ್ಶನದಂತೆ ಕಾರ್ಯನಿರ್ವಹಿಸುವುದು.

vi. ಮೇಲ್ಕಂಡ ತಂಡದ ಸದಸ್ಯರಿಗೆ ಸೇವಾ ಶುಲ್ಕವನ್ನು ನೀಡುವ ಕುರಿತಂತೆ ಸಮನ್ವಯಾಧಿಕಾರಿಯಾಗಿರುವ ಅಧೀಕ್ಷಕಇಂಜಿನಿಯರ್, ಲೋಕೋಪಯೋಗಿ ವೃತ್ತ, ಬೆಂಗಳೂರು ಇವರು ಕ್ರಮವಹಿಸುವುದು.

The Committee started working from March 3rd, 2020 continuously up to stoppage due to Covid lockdown. During the First Meeting, the available Scheduled Rates of the States were uploaded including MoRTH for Highways and CPWD for Buildings and SR's of other Organizations undertaking Engineering works. Meetings were held with the representatives of the following Organizations executing Engineering works also Forest, Horticulture and Water Shed. The same was presented with the hard copies for reviewing in Kaveri Guest House.

PWD, NH, PRED, PWD Electrical, KPTCL, ESCOM,
WRD, MI, KPCL, BWSSB, KUWSDB, RWS

During discussion the representatives briefed about the repetition of items like basic materials like aggregate, bitumen, steel, cement (key materials), Concreting, Earth work and also other materials.

The anomalies in the rates of Organizations were discussed with the Engineers and it was agreed to have one rate for materials in all SR and also Uniform Usage Charges of Machinery and Labour (as on prescribed by Department of LabourGoK) and also finished items like Earth Work

and Concreting. It was further discussed about grouping of Organizations, executing similar works like Water Supply, UGD - BWSSB, KUWSDB, RWS, Forest - Horticulture and Water Shed, PWD Electrical - ESCOMS and KPTCL, Irrigation - KPC, WRD and Minor Irrigation, Roads – NH, C&B, PRED.

Hitherto not covered, Ports and IWTD are now included and suggested to prepare own SR. It was further agreed by all Organizations to have a Uniform SR for all the Engineering Departments covering cost of Materials excluding GST, Usage Charges of Machinery, Wages to Labour, Contractors Profit, Overhead Charges, Area Specific Additionality, finished items of Earthwork, Concrete and Surveying. It was also accepted to have SR's for Organizations as grouped above.

Meetings were held at Government level and following recommendations of Technical Working Group were placed.

Common SR for items required by all the twelve Organizations. Uniform Charges of Machinery, Wages to Labour, Contractors Profit, Overhead Charges, Area Specific Additionality, finished items of Earthwork, Concrete and Surveying.

The Government was appraised about the anomaly in Wages of Labour in these Organizations as also in other States and requested the Government to consider the revision of Labour to the level of wages being considered by WRD / MI / KPC.

Meeting was held on September 1st, 2020 under the Chairmanship of Secretary PWD, wherein Additional Principal Chief Conservator of Forest, Chief Engineers of C&B, BBMP, BWSSB, KPCL, Joint Secretary Finance Department and representatives of Organizations were present

The recommendations of the Committee comprised of introduction of emerging technologies, removing items like Teak wood / Matti / Honne and all types of Marbles and also items like red-oxide flooring, mosaic which are obsolete. The items being scarce and expensive and preserve the natural resources. Apart from these Common SR other SR's of like Organizations (6 nos) are also prepared and placed.

Subsequently, Meeting was held with all the concerned Organizations under the Chairmanship of Additional Chief Secretary – Finance Department wherein Additional Chief Secretary - PWD, Additional Chief Secretary – Urban Development, Principal Secretaries with concerned Heads of Department and Engineers on 21st November, 2020 & the concluding decisions were taken in the meeting held under the Chairmanship of Secretary, PWD on 18-06-2021 & 14-01-2022. The Schedule of Rates of Ports & Inland Water Transport Department works will be included for the first time.

The SR prepared by PWD for Buildings is referred to by all Engineering Departments in the State and continued. The earlier Specifications and Rate Analysis have been replaced by Specifications and Rate Analysis based on CPWD. The Cost of Materials, Usage Charges of Machinery and Wages to Labour as prevailing in the State is continued.

Technical Working Group

Recommendations of the Technical Working Group

After successive meetings of the Group from 03-03-2020 to 18-06-2021 and continued interaction with the other Departments, the Group recommends:

1. Common SR for all the Engineering Departments comprising:
   - I. General Report
   - II. Bare Cost of Materials for all Common Engineering works (excluding GST)
   - III. Usage charges of Machinery (Hire charges)
   - IV. Wages to Labour
   - V. Overhead charges and Contractors Profit
   - VI. Area specific loading (Area weightage)
   - VII. Earthwork and Concrete works which are common to all Engineering Departments with Rate Analysis
   - VIII. Cement Constant and other references.
   - IX. Any other ready reckoners in Engineering Construction.

   These items will be bound and provided in soft and hard copies.

2. The total number of SR's will be common one with different volumes in comparison to earlier Thirty Two (32) SR's. One SR for PWD, One SR for Ports, One SR for Electrical, One SR for Irrigation, One SR for Water Supply and UGD, One SR for Forest.

SR's OF ORGANIZATIONS CONCERNED UNDER	NODAL ORGANIZATION
COMMON SR for Earthwork & Concrete Works	Technical Working Group
PWD (C&B), NH & PRED	PRAMC
WRD, MI & KPCL	WRD
BWSSB , KUWSDB & RWS	BWSSB
KPTCL, ESCOMS, PWD ELECTRICAL	BESCOM
PORTS & IWTD	PORTS
FOREST, WATERSHED, HORTICULTURE	FOREST

All SR's to follow SI units and round up the rates to the nearest Rupee and in no case indicate rates in paise, if need be the rate can be considered for 10 and multiples.

3. For Roads, Bridges and Culverts and other appurtenant works, specifications and rate analysis to be based on MoRTH Standard Data Rates of National Highways published in 2019 followed throughout the Country

   This recommendation is based on that the State Highways adopt the same Specification and Standard as in National Highway and Major District Roads, Bridges and Culverts on these two category of Roads follow the same Specification but modified Standards.

4. For Buildings and other appurtenant works Specifications and Rate Analysis to be based on CPWD, KPWD & Other state SRs which is followed throughout the Country and a few States shall be prepared based on the first principles and field experiences.

5. The Organizations mentioned above in para 2, will adopt common SR for Rate Analysis of Earthwork & Concrete works prepared by the Technical Working Group. The subsequent revisions of the Common SR on yearly basis and frequent revisions of key material rates shall be vested with PWD.

6. New technologies, new materials are available and the same are included in the respective SR's of Roads, Buildings and likewise other Departments follow suit.

7. The Group recommends Overhead charges of 10% and Contractors Profit of 10% invariably. In respect of such Organizations providing less than 10% for these two, they can continue with percentage being provided hitherto.

   Definition of Contractors Profit at 10%: For the Procurement of Materials, Mobilization of Labour and Machinery, Livelihood of labour for executing the work.

   Definition of Overhead charges at 10% : The Committee has defined the items covered under Overhead Charges of 10% as:

Supervision	4%
Site office, store shed	3%
Labour Amenities, Workmen compensation Act	2%
Quality Control, lab test	1%

8. The Cement Constants to be adopted in the preparation of Rate analysis by the Engineering departments shall be as per the table below –

Sl No.	Grade of Concrete	Cement Co-efficient in kg/m^3
1	M20	320
2	M25	340
3	M30	360

4	M35	390
5	M40	420
6	M45	430
7	M50	450
8	M55	450

9. So far there is no adoptable specification for furniture to be provided for public buildings including Courts, Circuit Houses and Quarters. The Group recommends that Public Buildings to be divided into two classifications as:

   i. VVIP

   ii. Remaining

   The type of furniture and type of fittings for Electrical, Water Supply, UGD works has been listed. *The PWD shall decide the class of the same issue suitable circulars as prevailing in the CPWD.*

10. Further:

    a. Items of RCC to include shuttering as preparation of DPR & more so taking measurements is cumbersome and further, Standard Data Book of MoRTH for concrete is inclusive for shuttering.

       A percentage upto one floor and for slabs is worked out based on the DPR's and incorporated.

    b. The Semi Dense Bituminous Concrete work is removed in the MoRTH V revision, however it shall be operated in the Road works as it is time tested for quality and the works are executed satisfactorily.

    c. Rates of each and every item will be inclusive of leads but not lifts. The lift charges for buildings shall be added floor wise to the finished rate at 1%.

    d. Item that ate obsolete like red-oxide, mosaic and such other items will be taken out from the SR. Likewise the group recommended scarce and expensive materials like Marble of all classifications and Teak / Matti / Honne will not be included in the SR. However, with the detailed discussion held under the Chairmanship of Secretary, PWD on 18-06-2021, the items of Teak Wood, Red Oxide & Marble shall be included in the Buildings SR with appropriate conditions on its usage.

    e. The experience of the Group is that Stone Masonry Buildings have not been proposed in recent years even for Mini Vidhana Soudha, DC's Office, Courts and such Buildings.

Group recommends the construction of Stone Masonry which cost twice that of brick work may be dropped from the SR for super structure beyond plinth. However, upto plinth the same needs to be continued. In case, any structure is proposed data rate may be worked from the rates available for the plinth.

The Irrigation Department provides for hidden cost on labour and also additional hidden cost on labour and the total hidden cost on labour varies from 23% to 33%. The Group recommends that this can be adopted over and above wages to labour fixed by the Department of Labour or 33% on the existing.

Further ESCOMs have given special Labour charges varying from 10% to 45%. As revision of minimum wages is being moved continuously at Government Level, the Group expresses that minimum wages charges that to be paid by all. However, the wages can be proportionate to the Labour and could be more than minimum. The Group recommends that, though not prevailing market rates, the Government need to consider revision upto 50% over and above minimum wages.

11. The Working Group recommends that the Common SR and the SR's worked out by the Departments may be put into system at Government level and brought into operation with the help of Officers of the Concerned Departments.

    A cell to be created with Superintending Engineer under PRAMC with dedicated in service Engineers. This cell will be guiding in the preparation and updating of Rates, Rate Analysis based on the Market Value and will be working with Government in PWD and associated with Special Officer PWD, Joint Secretary Finance.

    The Common SR containing items as above (para) and also SR's of other Organizations was circulated in soft copy to all the Heads of Department concerned for their inputs. The opinion received from the Heads of these Organizations had been complied and incorporated in the final copy of Common SR and SR's of Organization specific.

    Soft copies are handed over to FD for finalizing and concurring / arriving at a new SR for all the Engineering Organizations so that the updating & issue of addendums will be done by SR cell under PRAMC/PWD.

R Jaiprasad
Chairman, Technical Working Group

METRIC UNITS / SI UNITS

- 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 Unit	X	Conversion Factor	=	Value in SI Unit	Symbol
Area	square inches		6.45		square centimeters	cm^2
	square feet		0.0929		square meters	m^2
	square yards		0.836		square meters	m^2
	acres		0.405		hectares	ha
Basis Weight* or	lb (17x22-500)		3.760		grams per square meter	g/m^2
Substance	lb (24x36-500)		1.627		grams per square meter	g/m^2
(500-sheet ream) or	lb (25x38-500)		1.480		grams per square meter	g/m^2
Grammage* when	lb (25x40-500)		1.406		grams per square meter	g/m^2
expressed in g/m^2	pounds per 1000 sq ft (Paperboard)		4.882		grams per square meter	g/m^2
Breaking Length	meters		0.001		kilometers	km
Burst Index	g/cm^2		0.0981		kilopascals	$KPa.m^2/g$
	g/m^2				grams per square meter	g/m^2
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		kilonewtons 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/m^3
	pounds per cubic foot		1.60		kilograms per cubic meter	kg/m^3
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^3
	cubic feet		0.0283		cubic meters	m^3
	cubic yards		0.765		cubic meters	m^3

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

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

ಸದರಿ ತಿದ್ದುಪಡಿ ಅಧಿಸೂಚನೆ ಪ್ರತಿಯನ್ನು ಮಾಹಿತಿಗಾಗಿ ಈ ಪತ್ರದೊಂದಿಗೆ ಲಗತ್ತಿಸಿದೆ.

ಸಹಿ/–

ನಿರ್ದೇಶಕರು

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ:- ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಮಿತಿಯ ಶಿಫಾರಸ್ಸಿನನ್ವಯ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಲು ಸಮಿತಿಯನ್ನು ರಚಿಸುವ ಬಗ್ಗೆ.

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ಓದಲಾಗಿದೆ :1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ:ಜಸಂಇ 146 ಕೆಬಿಎನ್ 2017(ಭಾ-3), ದಿನಾಂಕ:23/12/2019.

2. ಪತ್ರ ಸಂಖ್ಯೆ:ಪ್ರ ಇಂ/ಜಸಂಅಸಂ/ಉ ಮತ್ತು ಮೌ ಘಟಕ/ದರಪಟ್ಟಿ/ಸಕಾಇಂ-6/ಸಇ-3/2021-22/388-391, ದಿನಾಂಕ:4/2/2022.

ಪ್ರಸ್ತಾವನೆ:-

ಮೇಲೆ ಓದಲಾದ (1) ರಲ್ಲಿನ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ 2018-19ನೇ ಸಾಲಿನಲ್ಲಿ ಪರಿಷ್ಕರಿಸಿದ ದರಪಟ್ಟಿಯನ್ನು ಅಳವಡಿಸುವ ಸಂಬಂಧ ಹೆಚ್ಚುವರಿ ಕಾರ್ಯದರ್ಶಿ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ರಚಿಸಲಾಗಿದ್ದ ಸಮಿತಿಯನ್ನೇ 2019-20ನೇ ಸಾಲಿಗೂ ಮುಂದುವರೆಸಿ ಆದೇಶಿಸಲಾಗಿತ್ತು.

ಮೇಲೆ ಓದಲಾದ (2)ರ ಪತ್ರದಲ್ಲಿ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ ಇವರು ವಿವಿಧ ಸರ್ಕಾರಿ ಇಲಾಖೆಗಳು ತಮ್ಮ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ಕಾಮಗಾರಿಗಳನ್ನು ನಿರ್ವಹಿಸಲು ತಯಾರು ಮಾಡಿರುವ ದರಪಟ್ಟಿಗಳ ದರಗಳಲ್ಲಿ ವ್ಯತ್ಯಾಸವಿರುವ ಅಂಶವು ಸರ್ಕಾರದ ಗಮನಕ್ಕೆ ಬಂದಿದ್ದು, ಎಲ್ಲಾ ಇಲಾಖೆಗಳ ದರಪಟ್ಟಿಗಳಲ್ಲಿ ಸಾಮ್ಯತೆ ತರಲು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಆದೇಶ ದಿನಾಂಕ:12/02/2019 ರಲ್ಲಿ ಶ್ರೀ ಆರ್. ಜೈಪ್ರಸಾದ್, ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್ (ನಿವೃತ್ತ) ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು ರಚಿಸಲಾಗಿರುತ್ತದೆ ಎಂದು ತಿಳಿಸಲಾಗಿದೆ.

ರಾಜ್ಯವ್ಯಾಪಿ ಏಕರೂಪ ದರಪಟ್ಟಿಗೆ ತಾಂತ್ರಿಕ ಕಾರ್ಯ ತಂಡವು ರಚನೆಯಾದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಸದರಿ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಮಿತಿಯ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವು ಈ ಬಗ್ಗೆ ಹಲವಾರು ಸುತ್ತಿನ ಸಭೆಗಳನ್ನು ನಡೆಸಿದ್ದು, ಚಾಲ್ತಿಯಲ್ಲಿದ್ದ ಮೂವತ್ತೆರಡು (32) ದರಪಟ್ಟಿಗಳನ್ನು ಕ್ರೋಢೀಕರಿಸಿ ಏಳು (7) ಸಂಪುಟಗಳನ್ನೊಳಗೊಂಡ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸುವ ಪ್ರಸ್ತಾವನೆಯನ್ನು ಸಲ್ಲಿಸಿರುತ್ತಾರೆ. ಒಂದು ಸಂಪುಟ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತಕ್ಕೆ (ಕೆ.ಪಿ.ಸಿ.ಎಲ್) ಗಳನ್ನು ಒಳಗೊಂಡಿರುತ್ತದೆ ಎಂದು ತಿಳಿಸಲಾಗಿದೆ.

ದಿನಾಂಕ:21/11/2020 ರಂದು ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಸಭೆಯಲ್ಲಿ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ ದರಪಟ್ಟಿಗಳಿಗೆ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯನ್ನು ನೋಡಲ್ ಇಲಾಖೆಯಾಗಿ ಗುರುತಿಸಿ ಶಿಫಾರಸ್ಸು ಮಾಡಲಾಗಿತ್ತು. ಅದರಂತೆ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ಸ್ಪೆಸಿಫಿಕ್ ಐಟಂಗಳ ದರಪಟ್ಟಿ ತಯಾರಿಕೆಗೆ ಬೇಕಾಗಿರುವ ಪೂರ್ವ ತಯಾರಿಯನ್ನು ಮಾಡಿಕೊಳ್ಳಲಾಗಿದೆ ಎಂದು ತಿಳಿಸಲಾಗಿದೆ.

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ದಿನಾಂಕ:07/01/2021 ರಂದು ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ಜಲಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಸಭೆಯಲ್ಲಿ ಮೂರೂ ಇಲಾಖೆಗಳ ಸಿಬ್ಬಂದಿಯವರನ್ನು ಕರೆಸಿ ಸಮಾಲೋಚಿಸಿ, ಆಯಾ ಇಲಾಖೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸ್ಪೆಸಿಫಿಕ್ ಐಟಂಗಳ ದರಪಟ್ಟಿ ತಯಾರಿಕೆಗೆ ಬೇಕಾಗಿರುವ ಪೂರ್ವ ತಯಾರಿಯನ್ನು ಮಾಡಿಕೊಳ್ಳಲು ಸೂಚನೆ ನೀಡಲಾಗಿರುತ್ತದೆ.

ತದನಂತರ, ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಪ್ರಗತಿ ಕುರಿತು ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಪಿ.ಡಬ್ಲ್ಯೂ.ಡಿ. ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ದಿನಾಂಕ:14/01/2022 ರಂದು ನಡೆದ ಸಭೆಯಲ್ಲಿ ಸಂಬಂಧಿಸಿದ ಎಲ್ಲಾ ಇಲಾಖೆಗಳಿಗೂ ಸಂಬಂಧಿಸಿದಂತೆ ಆಯಾ ಇಲಾಖಾ ಸ್ಪೆಸಿಫಿಕ್ ಐಟಂಗಳ ದರ ವಿಶ್ಲೇಷಣೆಯನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಮಿತಿಯ ಶಿಫಾರಸ್ಸಿನನ್ವಯ ಸಿದ್ಧಪಡಿಸಲು ಅಗತ್ಯ ಕ್ರಮ ಕೈಗೊಳ್ಳಲು ಸೂಚಿಸಿರುತ್ತಾರೆ. ಹಾಗೂ ಆಯಾ ಇಲಾಖೆಗಳು ಕರಡನ್ನು ಇಲಾಖಾ ಅಂತರ್ಜಾಲದಲ್ಲಿ ಪ್ರಕಟಿಸಿ ಸ್ಟೇಕ್ ಹೋಲ್ಡರ್‌ಗಳಿಂದ ಅಭಿಪ್ರಾಯಗಳನ್ನು ಪಡೆದು, ಸಕ್ಷಮ ಪ್ರಾಧಿಕಾರದಿಂದ ಕರಡು ದರಪಟ್ಟಿಗೆ ಅನುಮೋದನೆ ಪಡೆದು ಸರ್ಕಾರಕ್ಕೆ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಸಲ್ಲಿಸಲು ಸೂಚನೆ ನೀಡಲಾಗಿರುತ್ತದೆ. ಇದು ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖಾ ಕಾಮಗಾರಿಗಳಿಗಾಗಿ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಭಾಗವಾಗಿ ಸೇರ್ಪಡೆಗೊಳ್ಳುವ ಪ್ರಸ್ತಾವನೆ ಇರುತ್ತದೆ.

ಮೇಲ್ಕಂಡಂತೆ ಆಗಿರುವ ಬೆಳವಣಿಗೆಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ಸ್ಪೆಸಿಫಿಕ್ ಐಟಂಗಳನ್ನೊಳಗೊಂಡ ದರಪಟ್ಟಿ ಅಂತಿಮಗೊಳಿಸುವ ಕುರಿತು ಮುಂದಿನ ಕ್ರಮ ತೆಗೆದುಕೊಳ್ಳಲು ಸಮಿತಿಯನ್ನು ರಚಿಸುವಂತೆ ಕೋರಿರುತ್ತಾರೆ.

ಅದರಂತೆ ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿನ ಅಂಶಗಳನ್ನು ಕೂಲಂಕಷವಾಗಿ ಪರಿಶೀಲಿಸಿ, ಈ ಕೆಳಗಿನಂತೆ ಆದೇಶಿಸಿದೆ.

ಸರ್ಕಾರದ ಆದೇಶ ಇ-ಸಂಖ್ಯೆ:ಜಸಂಇ 43 ಕೆಬಿಎನ್ 2022, ಬೆಂಗಳೂರು ದಿನಾಂಕ:18/02/2022

ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಭಾಗವಾಗಿ ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ 2021-22ನೇ ಸಾಲಿನ ದರಪಟ್ಟಿಯನ್ನು ಪರಿಷ್ಕರಿಸಲು ಈ ಕೆಳಕಂಡಂತೆ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ ಆದೇಶಿಸಲಾಗಿದೆ

1	ಕಾರ್ಯದರ್ಶಿಗಳು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಅಧ್ಯಕ್ಷರು
2	ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ಜಲಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ
3	ಶ್ರೀ ಸಿ.ಅನಂತರಾಮು, ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ (ನಿವೃತ್ತ) ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ಮತ್ತು ಸದಸ್ಯರು, ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡ, ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಮಿತಿ	ಸದಸ್ಯರು
4	ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
5	ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
6	ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕಾವೇರಿ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
7	ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ವಿಶ್ವೇಶ್ವರಯ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು

8	ಉಪ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ, ಪಿ.ಡಬ್ಲ್ಯೂ.ಡಿ-ಆರ್ಥಿಕ ಕೋಶ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
9	ಹೆಚ್ಚುವರಿ ಆಯುಕ್ತರು, ವಾಣಿಜ್ಯ ತೆರಿಗೆ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
10	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಆಲಮಟ್ಟಿ	ಸದಸ್ಯರು
11	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಕಾವೇರಿ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಮೈಸೂರು	ಸದಸ್ಯರು
12	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ವಿಶ್ವೇಶ್ವರಯ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ತುಮಕೂರು.	ಸದಸ್ಯರು
13	ನಿರ್ದೇಶಕರು, ಕಾಡಾ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
14	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ನೀರಾವರಿ ಕೇಂದ್ರ ವಲಯ, ಮುನಿರಾಬಾದ್.	ಸದಸ್ಯರು
15	ಮುಖ್ಯ ಇಂಜಿನಿಯರ್ ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ನೀರಾವರಿ ಯೋಜನಾ ವಲಯ, ಕಲಬುರಗಿ.	ಸದಸ್ಯರು
16	ಜಂಟಿ ಕಾರ್ಮಿಕ ಆಯುಕ್ತರು, ಕನಿಷ್ಠ ವೇತನ ಮತ್ತು ಬಾಲ ಕಾರ್ಮಿಕ, ಕಾರ್ಮಿಕ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ವಿಶೇಷ ಆಹ್ವಾನಿತರು

ಸದರಿ ಸಮಿತಿಯು ಏಕರೂಪ ಪರಿಷ್ಕೃತ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸುವಾಗ ವಿವಿಧ ಐಟಂಗಳಿಗೆ ಅನ್ವಯಿಸುವ ಸಾಮಗ್ರಿಗಳಾದ ಸಿಮೆಂಟ್, ಸ್ಟೀಲ್, ಡೀಸೆಲ್ ಸಾಮಗ್ರಿಗಳ ದರಗಳನ್ನು ಮತ್ತು ದಿನಾಂಕ:01/07/2017 ರಿಂದ ಜಿ.ಎಸ್.ಟಿ. ಜಾರಿಗೆ ಬಂದಿರುವುದರಿಂದ, ಅನ್ವಯಿಸುವ ಜಿ.ಎಸ್.ಟಿ. ಪರಿಗಣಿಸುವುದು ಹಾಗೂ ಕಾರ್ಮಿಕ ಇಲಾಖೆಯಿಂದ ಕಾರ್ಮಿಕ ದಿನಗೂಲಿ ದರಗಳು ಪ್ರಕಟವಾದ ನಂತರ, ಕರಡು ದರಪಟ್ಟಿಯನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಸೂಕ್ತ ಶಿಫಾರಸ್ಸಿನೊಂದಿಗೆ ಸರ್ಕಾರಕ್ಕೆ ಮೂರು (3) ತಿಂಗಳ ಒಳಗಾಗಿ 2021-22ನೇ ಸಾಲಿಗೆ ಅನ್ವಯವಾಗುವ ದರಪಟ್ಟಿಯನ್ನು ವರದಿಯೊಂದಿಗೆ ಸಲ್ಲಿಸುವುದು.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆಜ್ಞಾನುಸಾರ
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

8/2/2022

(ರವೀಂದ್ರ ಕೊಂಡ)
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ (ತಾಂತ್ರಿಕ-5)
ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ.

ಪ್ರತಿಯನ್ನು:

1. ಮಹಾಲೇಖಪಾಲರು (ಎ & ಇ), ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು.
2. ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಯವರ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನ ಸೌಧ.
3. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
4. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು,ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
5. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕಾವೇರಿ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
6. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ವಿಶ್ವೇಶ್ವರಯ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
7. ಮಾನ್ಯ ಜಲ ಸಂಪನ್ಮೂಲ ಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಿಧಾನಸೌಧ.

8. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರ.
9. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿಗಳು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರ.
10. ಹೆಚ್ಚುವರಿ ಕಾರ್ಯದರ್ಶಿಗಳ ಆಪ್ತ ಸಹಾಯಕರು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರ.
1. ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಬೆಂಗಳೂರು.
12. ಹೆಚ್ಚುವರಿ ಆಯುಕ್ತರು, ವಾಣಿಜ್ಯ ತೆರಿಗೆ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
13. ಸರ್ಕಾರದ ಉಪ ಕಾರ್ಯದರ್ಶಿ (ಕೃಭಾಜನಿ) ರವರ ಆಪ್ತ ಸಹಾಯಕರು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರ.
14. ಸಂಬಂಧಪಟ್ಟ ಎಲ್ಲಾ ಸದಸ್ಯರುಗಳಿಗೆ (ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು, ಯೋಜನೆ ಮತ್ತು ತನಿಖಾ ಘಟಕ, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ ರವರ ಮೂಲಕ)
15. ವಿಶೇಷ ಕರ್ತವ್ಯಾಧಿಕಾರಿ (ತಾಂತ್ರಿಕ-3), ಜ.ಸಂ. ಇಲಾಖೆ.
16. ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ (ತಾಂತ್ರಿಕ-1)/ (ತಾಂತ್ರಿಕ-2) / (ತಾಂತ್ರಿಕ-4) / (ಕಾಡಾ), ಜ.ಸಂ. ಇಲಾಖೆ.
17. ತಾಂತ್ರಿಕ ಸಹಾಯಕರು (ತಾಂತ್ರಿಕ-6)/(ತಾಂತ್ರಿಕ-7), ಜ.ಸಂ. ಇಲಾಖೆ.
18. ಶಾಖಾ ರಕ್ಷಕ ಕಡತ / ಹೆಚ್ಚುವರಿ ಪ್ರತಿಗಳು.

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ:- 2021-22ನೇ ಸಾಲಿನ ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಪಟ್ಟಿಯ ಪ್ರಕಟಣೆ ಬಗ್ಗೆ.

ಓದಲಾಗಿದೆ. –1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಪಿಡಬ್ಲ್ಯೂಡಿ 65 ಆರ್‌ಡಿಎಫ್ 2018 ದಿನಾಂಕ 04-04-2019

2. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಆಇ 259 ಆಕೋ-2/2018 ದಿನಾಂಕ 17-02-2020.
3. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ ಇವರ ಪತ್ರ ದಿನಾಂಕ 31-03-2022.
4. ಪ್ರಧಾನ ವ್ಯವಸ್ಥಾಪಕರು,(ವಿ), ಗುಣಮಟ್ಟ, ಪ್ರಮಾಣಿತ & ಸುರಕ್ಷತೆ, ಬೆಸ್ಕಾಂ, ಬೆಂಗಳೂರು ಇವರ ಪತ್ರ ದಿನಾಂಕ 31-03-2022.
5. ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಮೂಲಸೌಲಭ್ಯ ಅಭಿವೃದ್ಧಿ, ಬಂದರು ಮತ್ತು ಒಳನಾಡು ಜಲಸಾರಿಗೆ ಇಲಾಖೆ ಇವರ ಪತ್ರ ದಿನಾಂಕ 31-03-2022.
6. ಪ್ರಧಾನ ಮುಖ್ಯ ಅರಣ್ಯ ಸಂಕರಕ್ಷಣಾಧಿಕಾರಿ (ಅಭಿವೃದ್ಧಿ) ಇವರ ಪತ್ರ ದಿನಾಂಕ 31-03-2022

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ಪೀಠಿಕೆ:-

ರಾಜ್ಯದ ಪ್ರಮುಖ ಇಲಾಖೆಗಳಾದ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ವಸತಿ ಇಲಾಖೆ, ಇಂಧನ ಇಲಾಖೆ ಮುಂತಾದವುಗಳು ತಮ್ಮದೇ ಆದ ಅನುಸೂಚಿ ದರಗಳನ್ನು (Schedule of Rates) ತಯಾರಿಸಿದ್ದು, ವಿವಿಧ ಕಾಮಗಾರಿಗಳ ಅಂದಾಜುಗಳ ತಯಾರಿಕೆಯಲ್ಲಿ ಬೇರೆ ಬೇರೆ ಇಲಾಖೆಗಳ ದರಗಳನ್ನು ಅಳವಡಿಸಿ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲಾಗುತ್ತಿದೆ. GST ಅನುಷ್ಠಾನವಾದ ನಂತರದ ಅವಧಿಯಲ್ಲಿ ಒಂದು ಇಲಾಖೆಯಲ್ಲಿ GST ಪೂರ್ವ ದರಗಳಿದ್ದಲ್ಲಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯಲ್ಲಿ GST ನಂತರದ ದರಗಳೂ ಅಸ್ತಿತ್ವದಲ್ಲಿವೆ.

ಇದರಿಂದ ಅಂದಾಜುಗಳನ್ನು ತಯಾರಿಸಲು ಮತ್ತು ಟೆಂಡರ್ ಮೌಲ್ಯಮಾಪನ ಮಾಡುವಲ್ಲಿ ಅನೇಕ ಸಮಸ್ಯೆಗಳು ಉದ್ಭವವಾಗುತ್ತಿವೆ. ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಏಕರೂಪ ಸಮಗ್ರ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಿ ಪ್ರಕಟಿಸುವುದು ಸೂಕ್ತವೆಂದು ನಿರ್ಧರಿಸಲಾಗಿದ್ದು, ಮೇಲೆ ಓದಲಾದ ಕ್ರ.ಸಂ-1ರ ಆದೇಶದಂತೆ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯನ್ನು ನೋಡಲ್ ಇಲಾಖೆಯನ್ನಾಗಿ ನೇಮಿಸಿ, ಎಲ್ಲಾ ಪ್ರಮುಖ ಇಲಾಖೆಗಳ ಪ್ರತಿನಿಧಿಗಳನ್ನೊಳಗೊಂಡ ಸಮಿತಿಯನ್ನು ರಚಿಸಿ, ಸದರಿ ಸಮಿತಿ ಮೂಲಕ ಸಮಗ್ರವಾದ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಿ ಪ್ರಕಟಿಸಲು ನಿರ್ಧರಿಸಲಾಯಿತು. ಅದರಂತೆ ಕೆಳಕಂಡ ಸಮಿತಿಗಳನ್ನು ಮೇಲೆ ಓದಲಾದ ಸರ್ಕಾರದ ಆದೇಶ-1ರಂತೆ ರಚಿಸಲಾಯಿತು.

1. ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿ- ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಇ ಇವರ ಅಧ್ಯಕ್ಷತೆ

2. ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ:- ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಇ ಇವರ ಅಧ್ಯಕ್ಷತೆ.

ಈ ಸಮಿತಿಗಳು ಅನುಸೂಚಿ ದರಗಳ ತಯಾರಿ ಮತ್ತು ಪ್ರಕಟಣೆ ಕುರಿತು ಅಗತ್ಯ ಕ್ರಮವನ್ನು ಶೀಘ್ರವಾಗಿ ತೆಗೆದುಕೊಳ್ಳುವಂತೆ ಮತ್ತು ಸದರಿ ಅನುಸೂಚಿ ದರಗಳ ತಯಾರಿ ಕಾರ್ಯವನ್ನು 3 ತಿಂಗಳೊಳಗಾಗಿ ಅಂತಿಮಗೊಳಿಸಿ ದಿನಾಂಕ 01-06-2019ರಿಂದ ಕಡ್ಡಾಯವಾಗಿ ಜಾರಿಗೊಳಿಸಲು ಮೇಲ್ಕಂಡ ಆದೇಶಗಳಲ್ಲಿ ತಿಳಿಸಲಾಗಿದೆ.

ದಿನಾಂಕ 05-02-2020ರಂದು ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ (ವೆಚ್ಚ) ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಸಭೆಯಲ್ಲಿ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳನ್ನು ತಯಾರಿಸಲು ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು (Technical Working Group) ರಚಿಸಲು ಮೇಲೆ ಓದಲಾದ ಸರ್ಕಾರದ ಆದೇಶ-2ರಂತೆ ಶ್ರೀ ಆರ್. ಜೈಪ್ರಸಾದ್, ನಿವೃತ್ತ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ವಿವಿಧ ಇಲಾಖೆಗಳ ನಿವೃತ್ತ ಹಾಗೂ ಅಧಿಕಾರಿಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ಆದೇಶ ಹೊರಡಿಸಲಾಯಿತು. ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಲೋಇ ವೃತ್ತ, ಬೆಂಗಳೂರು ಇವರು ಈ ತಂಡದ ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ/ಸಮನ್ವಯಾಧಿಕಾರಿಯನ್ನಾಗಿ ಸಹ ನೇಮಿಸಲಾಯಿತು. ಸದರಿ ತಂಡವು ಮಾರ್ಚ್-2020ರ ಮಾಹೆಯೊಳಗೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರಿಸಿ ಸರ್ಕಾರಕ್ಕೆ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಸಲ್ಲಿಸಲು ಸಹ ಸೂಚಿಸಲಾಯಿತು.

ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವು ವಿವಿಧ ಇಲಾಖೆಗಳ ಒಟ್ಟು 32 ದರಪಟ್ಟಿಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡಿ, ಆಯಾ ಇಲಾಖೆಯ ಅಧಿಕಾರಿಗಳೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ, ವಿವಿಧ ಇಲಾಖೆಗಳನ್ನು ಒಗ್ಗೂಡಿಸಿ, ರಾಜ್ಯವ್ಯಾಪಿ ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಪಟ್ಟಿಯನ್ನು ಕೆಳಕಂಡಂತೆ ತಯಾರಿಸಲು ನಿರ್ಧರಿಸಿತು.

SR's OF ORGANIZATIONS CONCERNED UNDER	NODAL ORGANIZATION
PWD (C&B), NH & PRED	PWD
WRDO, MI & KPCL	WRDO
BWSSB , KUWSDB & RWS	BWSSB
KPTCL, ESCOMS, PWD ELECTRICAL	BESCOM
PORTS & IWTD & Airports	PORTS
FOREST, WATERSHED, HORTICULTURE	FOREST

ಮೇಲೆ ತಿಳಿಸಿದಂತೆ ವಿವಿಧ ಇಲಾಖೆಗಳನ್ನು ಒಗ್ಗೂಡಿಸಿ 6 ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಗಳನ್ನು ತಯಾರಿಸಲು ನಿರ್ಧರಿಸಲಾಯಿತು. ಹಾಗೂ ವಿವಿಧ ಇಲಾಖೆಗಳು ತಮ್ಮ ಹಿಂದಿನ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಳ್ಳುತ್ತಿದ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಪರಿಶೀಲಿಸಿ rationalization ಮಾಡಲಾಗಿರುತ್ತದೆ.

- ನಿರ್ಮಾಣ ಸಾಮಗ್ರಿಗಳ ದರಗಳನ್ನು ಎಲ್ಲಾ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಿದೆ.

- ಕೂಲಿ ಕಾರ್ಮಿಕರ ದರಗಳನ್ನು ಕಾರ್ಮಿಕ ಇಲಾಖೆಯು ಪ್ರಕಟಿಸಿರುವಂತೆ ಕನಿಷ್ಟ ದರಗಳನ್ನು ಸಹ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅವಳಡಿಸಲಾಗಿದೆ.
- Ministry of Road Transport and Highways-2019 Standard data book ತಂತ್ರಾಂಶದಂತೆ ಯಂತ್ರೋಪಕರಣಗಳ ಬಾಡಿಗೆ ದರಗಳನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿದೆ.
- ಗುತ್ತಿಗೆದಾರರ ಲಾಭಾಂಶವನ್ನು ಗರಿಷ್ಟ ಶೇ10% ಅಥವಾ ಆಯಾ ಇಲಾಖೆಗಳು ನಿಗಧಿಪಡಿಸಿರುವ ಇವುಗಳಲ್ಲಿ ಯಾವುದು ಕಡಿಮೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿದೆ.
- Overhead charges ದರಗಳನ್ನು ಗರಿಷ್ಟ ಶೇ10% ಅಥವಾ ಆಯಾ ಇಲಾಖೆಗಳು ನಿಗಧಿಪಡಿಸಿರುವ ಇವುಗಳಲ್ಲಿ ಯಾವುದು ಕಡಿಮೆಯೋ ಅದನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿದೆ.
- Area specific loading ಅಂಶವನ್ನು ಎಲ್ಲ ಇಲಾಖೆಗಳ ಕಾಮಗಾರಿಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯಲ್ಲಿ ಅಳವಡಿಸಲಾಗಿದೆ.
- Earth work, Cement concrete items with shuttering and surveying ಐಟಂಗಳನ್ನು ಸಹ ಈ ದರಪಟ್ಟಿಯಲ್ಲಿ ಎಲ್ಲ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ಅಳವಡಿಸಿರುತ್ತದೆ.
- ಇತರೆ ಇಂಜಿನಿಯರಿಂಗ್ ಇಲಾಖೆಗಳು ತಮ್ಮ ಕಾರ್ಯಕ್ಷೇತ್ರಕ್ಕೆ ಅವಶ್ಯವಿರುವಂತಹ specific construction materials and itemsಗಳನ್ನು ತಮ್ಮ ದರಪಟ್ಟಿಯಲ್ಲಿ ಪ್ರತ್ಯೇಕವಾಗಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾಗಿದೆ.

ಮೇಲಿನ ಅಂಶಗಳನ್ನು ಪರಿಗಣಿಸಿ ದಿನಾಂಕ 14-01-2022ರಂದು ನಡೆದ ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳ ರಚನಾ ಸಮಿತಿಯ ಸಭೆಯಲ್ಲಿ ಆಯಾ ಇಲಾಖೆಗಳು ತಯಾರಿಸಿರುವ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಏಕರೂಪ ದರಪಟ್ಟಿಗೆ ಸಕ್ಷಮ ಪ್ರಾಧಿಕಾರದ ಅನುಮೋದನೆ ಪಡೆದು ಆಯಾ ಇಲಾಖೆಯ ವೆಬ್‌ಸೈಟ್‌ನಲ್ಲಿ ಪ್ರಕಟಿಸಲು ಸೂಚಿಸಲಾಯಿತು. ಹಾಗೂ ಈ ದರಪಟ್ಟಿಯ ಬಗ್ಗೆ ವಿವಿಧ stake holdersಗಳ ಅಭಿಪ್ರಾಯ/ ಸಲಹೆ/ ಆಕ್ಷೇಪಣೆಗಳನ್ನು ಪಡೆಯಲು ನಿರ್ಧರಿಸಲಾಗಿದೆ. ಅದರಂತೆ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಅರಣ್ಯ ಇಲಾಖೆಗಳು ಕರಡು ದರಪಟ್ಟಿಯನ್ನು ತಮ್ಮ ಇಲಾಖೆಗಳ ಜಾಲತಾಣದಲ್ಲಿ ಪ್ರಕಟಿಸಿರುತ್ತವೆ. ಹಾಗೂ Escom ದರಪಟ್ಟಿಯ ಬಗ್ಗೆ stake holdersಗಳೊಂದಿಗೆ ಚರ್ಚಿಸಿ ಅಂತಿಮಗೊಳಿಸಲಾಗಿದೆ.

ಮೇಲೆ ಓದಲಾದ ಉಲ್ಲೇಖ-3ರ ಪತ್ರದಲ್ಲಿ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ (ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆ ಮತ್ತು ಕೆಪಿಸಿಎಲ್ ಇಲಾಖೆಗಳು ಒಳಗೊಂಡಂತೆ) ಅನುಸೂಚಿತ ಏಕರೂಪ ದರಪಟ್ಟಿ-ಸಂಪುಟ IV, ಉಲ್ಲೇಖ-4ರ ಪತ್ರದಲ್ಲಿ ಬೆಸ್ಕಾಂ (ಎಸ್ಕಾಂ, ಕೆಪಿಟಿಸಿಎಲ್ ಮತ್ತು ಲೋಕೋಪಯೋಗಿ ವಿದ್ಯುತ್ ದರಪಟ್ಟಿ) ಸಂಸ್ಥೆಯು ಅನುಸೂಚಿತ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-VI, ಅಧೀಕ್ಷಕ ಇಂಜಿನಿಯರ್, ಮೂಲಸೌಲಭ್ಯ ಅಭಿವೃದ್ಧಿ, ಬಂದರು ಮತ್ತು ಒಳನಾಡು ಜಲಸಾರಿಗೆ ಇಲಾಖೆ ಇವರು ಏಕರೂಪ ಅನುಸೂಚಿ ದರಪಟ್ಟಿ ಸಂಪುಟ-VII (ಬಂದರು ಮತ್ತು ವಿಮಾನ ನಿಲ್ದಾಣ ದರಪಟ್ಟಿ) ಹಾಗೂ ಉಲ್ಲೇಖ-5ರ ಪತ್ರದಲ್ಲಿ ಪ್ರಧಾನ ಮುಖ್ಯ ಅರಣ್ಯ ಸಂಕರಕ್ಷಣಾಧಿಕಾರಿ (ಅಭಿವೃದ್ಧಿ) ಇವರು ಏಕರೂಪ ಅನುಸೂಚಿ ದರಪಟ್ಟಿ ಸಂಪುಟ-VIII (ಅರಣ್ಯ, ತೋಟಗಾರಿಕೆ ಮತ್ತು ಜಲಾಯನ ಪ್ರದೇಶ ದರಪಟ್ಟಿ)ಗಳಿಗೆ ಅನುಮೋದನೆ

ಕೋರಿ ಕರಡು ದರಪಟ್ಟಿಗಳನ್ನು ಏಕರೂಪ ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿಗೆ ಸಲ್ಲಿಸಲಾಗಿದೆ.

ದಿನಾಂಕ 31-03-2022ರಂದು ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿಯ ಸಭೆಯಲ್ಲಿ ಏಕರೂಪ ಅನುಸೂಚಿತ ದರಪಟ್ಟಿಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ಚರ್ಚಿಸಿದ್ದು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ IV, ಬೆಸ್ಕಾಂನ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ- VI, ಬಂದರು ಮತ್ತು ವಿಮಾನ ನಿಲ್ದಾಣ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ- VII ಮತ್ತು ಅರಣ್ಯ ಇಲಾಖೆಯ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ- VIII ಅಂಗೀಕರಿಸಿ ತಕ್ಷಣದಿಂದ ಜಾರಿಗೆ ತರಲು ನಿರ್ಧರಿಸಲಾಗಿರುತ್ತದೆ.

ಈ ವಿವರಗಳನ್ನು ಪರಿಶೀಲಿಸಿ ಕೆಳಕಂಡಂತೆ ಆದೇಶಿಸಲಾಗಿದೆ.

ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ ಲೋಇ 51 ಆರ್‌ಡಿಎಫ್ 2019, ಬೆಂಗಳೂರು
ದಿನಾಂಕ 31-03-2022

ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡದ ಮಾರ್ಗದರ್ಶನದಲ್ಲಿ ತಯಾರಿಸಿರುವ 2021-22ನೇ ಸಾಲಿನ ಈ ಕೆಳಕಂಡ ಏಕರೂಪ ದರಪಟ್ಟಿಗಳ ಸಂಪುಟಗಳನ್ನು ರಾಜ್ಯವ್ಯಾಪಿ ಎಲ್ಲ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ ತಕ್ಷಣದಿಂದ ಹಾಗೂ ಮುಂದಿನ ಆದೇಶದವರೆಗೆ ಜಾರಿಗೆ ತರಲಾಗಿದೆ.

SR's OF ORGANIZATIONS CONCERNED UNDER	NODAL ORGANIZATION	Volume
WRDO, MI & KPCL	WRDO	IV
KPTCL, ESCOMS, PWD ELECTRICAL	BESCOM	VI
PORTS & IWTD & Airports	PORTS	VII
FOREST, WATERSHED, HORTICULTURE	FOREST	VIII

ಈ ಕಾಮಗಾರಿಗಳನ್ನು ನಿರ್ವಹಿಸುವ ಸರ್ಕಾರದ ಎಲ್ಲಾ ಇಲಾಖೆಗಳು/ನಿಗಮ/ಮಂಡಳಿ/ ಸಂಸ್ಥೆಗಳು ತಕ್ಷಣದಿಂದಲೇ ಜಾರಿಗೆ ಬರುವಂತೆ ಸದರಿ ದರಗಳನ್ನು ಅಂದಾಜು ತಯಾರಿಕೆ, ಟೆಂಡರ್ ಪ್ರಕ್ರಿಯೆ ಮತ್ತು ಅನುಷ್ಠಾನಗೊಳಿಸುವಲ್ಲಿ ಅಳವಡಿಕೊಳ್ಳತಕ್ಕದ್ದು.

ಈ ಏಕರೂಪ ಅನುಸೂಚಿತ ಸಂಪುಟಗಳನ್ನು ಆಯಾ ಸಂಬಂಧಪಟ್ಟ ಇಲಾಖೆಗಳ ಹಾಗೂ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಅಂತರ್ಜಾಲದಲ್ಲಿ ಪ್ರಕಟಿಸುವುದು.

ವಿದ್ಯುತ್ ಇಲಾಖೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮುಖ್ಯ ನಿರ್ಮಾಣ ಸಾಮಗ್ರಿಗಳಾದ Aluminum, copper, Steel, Insulating material, PVC/XLPE compound, CRGO core, Transformer oil ದರಗಳು IEEMA ಸುತ್ತೋಲೆಗಳ ಪ್ರಕಾರ ಪ್ರತಿ ತಿಂಗಳು ಏರುಪೇರು ಆಗುತ್ತಿದ್ದು, ಪ್ರತಿ ತ್ರೈಮಾಸಿಕ ಅವಧಿಗೆ ಅಥವಾ ಶೇ.10 ಕ್ಕಿಂತ ದರ ವ್ಯತ್ಯಾಸವಾದಲ್ಲಿ ಪರಿಷ್ಕೃತ ದರಗಳನ್ನು ನಿಯಮಾನುಸಾರ ಪ್ರಕಟಿಸುವುದು.

ಶೇ. 12% ಜಿಎಸ್‌ಟಿ ಪ್ರತಿಶತವನ್ನು ಅಂದಾಜುಪಟ್ಟಿಯಲ್ಲಿ ಪ್ರತ್ಯೇಕವಾಗಿ ಸೇರ್ಪಡೆ ಮಾಡುವುದು.

ಗುತ್ತಿಗೆ ಅವಧಿಯನ್ನು ಗುತ್ತಿಗೆದಾರರ ವಿಳಂಬದಿಂದ ವಿಸ್ತರಿಸಿದಲ್ಲಿ ವಿಸ್ತೃತ ಗುತ್ತಿಗೆ ಅವಧಿಯಲ್ಲಿ ಆಗುವ ಜಿಎಸ್‌ಟಿ ಹೆಚ್ಚಳವನ್ನು ಗುತ್ತಿಗೆದಾರರೇ ಭರಿಸತಕ್ಕದ್ದು.

ಈ ಅನುಸೂಚಿ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-IV, VI, VII ಮತ್ತು VIII ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಎಲ್ಲ ಸಾಧ್ಯತೆ ಮತ್ತು ಭಾದ್ಯತೆಗಳನ್ನು ಸಂಬಂಧಪಟ್ಟ (WRD, MI, KPCL-Vol IV, Escoms, KPTCL and PWD-Vol-VI, IDD, Ports- Vol-VII, Forest, Horticulture, Watershed department-Vol-VIII) ಇಲಾಖೆಗಳು ಹೊಂದಿರುತ್ತವೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ

ಸಹಿ/- 31/3/2022
(ಬಿ.ಹೆಚ್. ಅನಿಲ್ ಕುಮಾರ್)
ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ
ಹಾಗೂ ಅಧ್ಯಕ್ಷರು, ಅನುಸೂಚಿ
ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ,
ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ

ಇವರಿಗೆ:

1. ಮಹಾಲೇಖಪಾಲರು, (ಲೆಕ್ಕ ಪರೀಕ್ಷೆ-II), ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು.
2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
3. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಇಂಧನ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
4. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
5. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಅರಣ್ಯ, ಪರಿಸರ ಮತ್ತು ಜೀವಿಶಾಸ್ತ್ರ, ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
6. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ
7. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಮೂಲಸೌಕರ್ಯ ಅಭಿವೃದ್ಧಿ, ಬಂದರು ಮತ್ತು ಒಳನಾಡು ಜಲಸಾರಿಗೆ ಇಲಾಖೆ
8. ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಸತಿ ಇಲಾಖೆ.
9. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ (ವೆಚ್ಚ), ಬೆಂಗಳೂರು.
10. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಬೆಂಗಳೂರು
11. ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಸಣ್ಣನೀರಾವರಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.
12. ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್, ರಸ್ತೆ, ಯೋಜನೆ ಮತ್ತು ಆಸ್ತಿ ನಿರ್ವಹಣೆ ಕೇಂದ್ರ,(PRAMC), ಬೆಂಗಳೂರು- ಇವರು ಈ ಸಂಪುಟಗಳನ್ನು ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆಯ ಅಂತರ್ಜಾಲದಲ್ಲಿ ಪ್ರಕಟಿಸುವುದು.
13. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಸಂಪರ್ಕ ಮತ್ತು ಕಟ್ಟಡಗಳು (ದಕ್ಷಿಣ), (ಉತ್ತರ), (ಈಶಾನ್ಯ) ಮತ್ತು ಕೇಂದ್ರ ವಲಯಗಳು, ಬೆಂಗಳೂರು, ಧಾರವಾಡ, ಕಲಬುರಗಿ, ಶಿವಮೊಗ್ಗ.
14. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಆನಂದರಾವ್ ವೃತ್ತ, ಬೆಂಗಳೂರು -ತಮ್ಮ ಇಲಾಖೆಯ ವೆಬ್‌ಸೈಟ್‌ನಲ್ಲಿ ಪ್ರಕಟಿಸಲು

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಇ-ಸಂಖ್ಯೆ:ಜಸಂಇ 43 ಕೆಬಿಎನ್ 2022

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ
ವಿಕಾಸ ಸೌಧ
ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 06/04/2022

ಇಂದ:
ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ,
ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ,
ಬೆಂಗಳೂರು.

ಇವರಿಗೆ:

1. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
2. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
3. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕಾವೇರಿ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
4. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ವಿಶ್ವೇಶ್ವರಯ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು.
5. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಬೆಂಗಳೂರು.
6. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್(ಅಂರಾಜ), ಜಲ ಸಂಪನ್ಮೂಲ ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ, ಬೆಂಗಳೂರು.
7. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, ಕೇಂದ್ರ ಯಾಂತ್ರಿಕ ಸಂಸ್ಥೆ, ಬೆಂಗಳೂರು.
8. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್/ನಿಬಂಧಕರು, ಎ.ಸಿ.ಐ.ಡಬ್ಲ್ಯೂ.ಆರ್.ಎಂ. ಬೆಂಗಳೂರು.
9. ನಿರ್ದೇಶಕರು, ಕೆ.ಇ.ಆರ್.ಎಸ್, ಮಂಡ್ಯ.
10. ನಿರ್ದೇಶಕರು, ವಾಲ್ಮಿ, ಧಾರವಾಡ.
11. ನಿರ್ದೇಶಕರು, ಕಾಡಾ, ಕಾಡಾ ನಿರ್ದೇಶನಾಲಯ, ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೆ

ವಿಷಯ:- ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಸಂಪುಟ-4ರ ಭಾಗವಾಗಿ ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯಲ್ಲಿ 2021-22ನೇ ಸಾಲಿನ ಪರಿಷ್ಕೃತ ದರಪಟ್ಟಿಯನ್ನು ಅಳವಡಿಸುವ ಕುರಿತು

ಉಲ್ಲೇಖ:- 1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಆಇ 259 ಆಕೋ-2/2018, ದಿನಾಂಕ:17.02.2020
2. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಜಸಂಇ43ಕೆಬಿಎನ್ 2022, ದಿನಾಂಕ:18.02.2022.
3. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಲೋಇ51ಆರ್‌ಡಿಎಫ್2019, ದಿನಾಂಕ:31.03.2022

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ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಉಲ್ಲೇಖಿತ (1)ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ತಯಾರು ಮಾಡುವ ಸಲುವಾಗಿ ಶ್ರೀ ಜೈಪ್ರಸಾದ್, ನಿವೃತ್ತ ಪ್ರಧಾನ ಇಂಜಿನಿಯರ್ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ ತಂಡವನ್ನು ರಚಿಸಲಾಗಿರುತ್ತದೆ. ಸದರಿ ತಂಡವು ಎಲ್ಲಾ ಇಲಾಖೆಯೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ 32 ದರಸೂಚಿಗಳನ್ನು 7 ಸಂಪುಟದ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಶಿಫಾರಸ್ಸು ಮಾಡಿರುತ್ತದೆ. ಅದರಲ್ಲಿ, ಸಂಪುಟ-4 ರಲ್ಲಿ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ, ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆ ಮತ್ತು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ ಒಳಗೊಂಡಿರುವುದಾಗಿ ತಿಳಿಸಲಾಗಿದೆ.

ದಿನಾಂಕ:21.11.2020 ರಂದು ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಆರ್ಥಿಕ ಇಲಾಖೆ ರವರು ಜರುಗಿಸಿದ ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಪರಿಶೀಲನಾ ಸಮಿತಿ ಸಭೆಯಲ್ಲಿ ತಾಂತ್ರಿಕ ಕಾರ್ಯನಿರತ

ತಂಡದವರು ಏಕರೂಪ ದರಪಟ್ಟಿಯ ತಯಾರಿಕೆಯಲ್ಲಿ ಪ್ರಮುಖವಾಗಿ ಅಳವಡಿಸಿಕೊಳ್ಳಲಾದ ಪ್ರಾವಿಷನ್‌ಗಳ ಕುರಿತು ವಿವರಣೆ ನೀಡಲಾಗಿರುತ್ತದೆ.

ದಿನಾಂಕ:14.01.2022 ರಂದು ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಜರುಗಿದ ದರಪಟ್ಟಿಯ ಪರಿಶೀಲನಾ ಸಮಿತಿ ಸಭೆಯಲ್ಲಿ ಎಲ್ಲಾ ಇಲಾಖೆಗಳಿಗೆ ಅನ್ವಯವಾಗುವಂತೆ Common Schedule of Ratesರಲ್ಲಿ ಅಡಕವಾಗುವ ವಿವರಗಳ ಬಗ್ಗೆ ಚರ್ಚಿಸಲಾಗಿರುತ್ತದೆ.

2021-22ನೇ ಸಾಲಿಗೆ ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಸಂಪುಟ-4 ರ ಭಾಗವಾಗಿ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖಾ ಸ್ಪೆಸಿಫಿಕ್ ಐಟಂಗಳನ್ನು ಅಂತಿಮಗೊಳಿಸಲು ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಪರಿಷ್ಕೃತ ದರಪಟ್ಟಿ ಸಮಿತಿಯನ್ನು ಉಲ್ಲೇಖ (2)ರ ಆದೇಶದಲ್ಲಿ ರಚಿಸಲಾಗಿರುತ್ತದೆ. ಸದರಿ ಸಮಿತಿಯು ದಿನಾಂಕ:08/03/2022 ಹಾಗೂ 28/03/2022 ಗಳಂದು ತಾಂತ್ರಿಕ ಕಾರ್ಯತಂಡದ ಅಧ್ಯಕ್ಷರನ್ನು ಒಳಗೊಂಡಂತೆ ಸಭೆಗಳನ್ನು ಜರುಗಿಸಿದ್ದು, ಚರ್ಚಿಸಲಾಗಿ, ಸಭೆಗಳಲ್ಲಿ ತೀರ್ಮಾನಿಸಿದಂತೆ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ಸ್ಪೆಸಿಫಿಕ್ ಐಟಂಗಳನ್ನು ಒಳಗೊಂಡ 2021-22ನೇ ಸಾಲಿನ ಅಂತಿಮ ಕರಡು ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ಸಿದ್ಧಪಡಿಸಲಾಗಿರುತ್ತದೆ.

ದಿನಾಂಕ:31/03/2022 ರಂದು ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ರವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ತಾಂತ್ರಿಕ ಕಾರ್ಯತಂಡದ ಅಧ್ಯಕ್ಷರ ಉಪಸ್ಥಿತಿಯಲ್ಲಿ ಜರುಗಿದ ಏಕರೂಪ ದರಪಟ್ಟಿ ಪರಿಶೀಲನಾ ಸಮಿತಿ ಸಭೆಯಲ್ಲಿ ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಸಂಪುಟ-4ರಲ್ಲಿ ಸೇರುವ ಮೂರು ಇಲಾಖೆಗಳ ದರಪಟ್ಟಿಯನ್ನು ಉಲ್ಲೇಖಿತ (3)ರ ಆದೇಶರಲ್ಲಿ ಅಂಗೀಕರಿಸಲಾಗಿದೆ..

ಅದರಂತೆ, ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯಲ್ಲಿ (ಭಾರಿ ಮತ್ತು ಮಧ್ಯಮ ನೀರಾವರಿ) ನಾಲ್ಕೂ ನಿಗಮಗಳಾದ ಕೃಷ್ಣಾ ಭಾಗ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತ, ಕರ್ನಾಟಕ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ, ಕಾವೇರಿ ನೀರಾವರಿ ನಿಗಮ ನಿಯಮಿತ ಮತ್ತು ವಿಶ್ವೇಶ್ವರಯ್ಯ ಜಲ ನಿಗಮ ನಿಯಮಿತಗಳಡಿಯಲ್ಲಿ ಏಕರೂಪ ದರಪಟ್ಟಿ ಸಂಪುಟ-4 ರ ಭಾಗವಾಗಿ ಜಲಸಂಪನ್ಮೂಲ ಇಲಾಖೆ ಒಳಗೊಂಡ 2021-22 ನೇ ಸಾಲಿನ ಏಕರೂಪ ದರಪಟ್ಟಿಯನ್ನು ದಿನಾಂಕ:31/03/2022 ರಿಂದ ಅನ್ವಯವಾಗುವಂತೆ ಜಾರಿಗೆ ತರಲಾಗಿದೆ.

ಸದರಿ ಏಕರೂಪ ದರಪಟ್ಟಿಯ ಸಂಪುಟ-4 ನ್ನು ನಾಲ್ಕೂ ನಿಗಮಗಳಡಿ ಬರುವ ಎಲ್ಲಾ ಅಧೀಕ್ಷಕ ಅಭಿಯಂತರರು, ಪರಿಷ್ಕೃತ ದರಪಟ್ಟಿಯನ್ನು ದಿನಾಂಕ:31/03/2022 ರಿಂದ ಮುಂದಿನ ಆದೇಶದವರೆಗೆ ಜಾರಿಗೆ ಬರುವಂತೆ ಪ್ರತ್ಯೇಕ ಅಧಿಸೂಚನೆ ಹೊರಡಿಸುವಂತೆ ಸೂಕ್ತ ನಿರ್ದೇಶನ ನೀಡುವುದು.

ತಮ್ಮ ವಿಶ್ವಾಸಿ

6/4/2022

(ರವೀಂದ್ರ ಕೊಂಡ)
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ (ತಾಂತ್ರಿಕ-5)
ಜಲ ಸಂಪನ್ಮೂಲ ಇಲಾಖೆ

ಪ್ರತಿಯನ್ನು ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ ಹಾಗೂ ಅಧ್ಯಕ್ಷರು, ಅನುಸೂಚಿ ದರಗಳ ಪರಿಶೀಲನಾ ಸಮಿತಿ, ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ, ವಿಕಾಸ ಸೌಧ ಇವರ ಮಾಹಿತಿಗಾಗಿ ಸಲ್ಲಿಸಿದೆ.

FOREWORD

A Committee was constituted vide G.O No. WRD 43 KBN 2022, Bengaluru, dated: 18.02.2022 under the Chairmanship of Secretary, WRD, Bangalore with the following members, for preparing the Draft Schedule of Rates for the year 2021-22 pertaining to WRD specific items.

1. Secretary, Water Resources Department , Bengaluru : Chairman
2. Sri. C. Anantharamu, Chief Engineer (Rtd), Water Resources Department and Member,Technical Working group, Bengaluru : Member
3. Managing Director, Krishna Bhagya Jala Nigama Limited , Bengaluru : Member
4. Managing Director, Karnataka Neeravari Nigama Limited, Bengaluru : Member
5. Managing Director, Cauvery Neeravari Nigama Limited, Bengaluru : Member
6. Managing Director, Visvesvaraya Jala Nigama Limited, Bengaluru : Member
7. Deputy Secretary, Finance Department, (PWD-Finance Cell) Bengaluru : Member
8. Additional Commissioner, Commercial Tax Department Bengaluru. : Member
9. Chief Engineer, Krishna Bhagya Jala Nigama Limited , Almatti. : Member
10. Chief Engineer, Cauvery Neeravari Nigama Limited, Mysuru. : Member

11. Chief Engineer, : Member
Visvesvaraya Jala Nigama Limited,
Tumkuru.

12. Director, : Member
CADA,
Bengaluru.

13. Chief Engineer, : Member
Irrigation Central Zone,
Munirabad.

14. Chief Engineer, : Member
Irrigation Project Zone,
Kalaburgi.

15. Joint Labour Commissioner, : Special Invitee
Minimum Wages and Child Labour, Labour Dept.,
Bengaluru.

16. Chief Engineer, : Member Secretary
Water Resources Development
Organisation,Bengaluru.

The specifications for the following chapters have been retained from the SR of 2018-19. However the rates have been revised.

a) Dam and Allied works
b) Canal and Allied works
c) Canal Cross Drainage works
d) Tunnel and Allied works
e) Gates / Hoists and Allied works
f) Preliminary and Maintenance works

Similar/Equivalent Items pertaining to above chapters of 2018-19 SR if available in Vol-I, II & III of PWD are deleted and Water Resources Department Speific items are retained for 2021-22.

The following information are considered for updating the SR 2021-22:-

- Rates for Cement , Reinforcement Steel and Structrual Steel FA, CA Stones etc., are obtained from PWD SR 2021-22 Vol-I, II & III .

- Karnataka State Annual Average Consumer Price Index for industrial workers for the year 2017 obtained from Office of the Commissioner of Labour in Karnataka, Bengaluru.

✯ Whole Sale Price Index of commodities obtained from official website of Economic Advisor, Ministry of Commerce & Industry, GOI.

✯ Explosives: Average rates for Explosives are obtained from M/s Konar Explosives & Co. Bangalore, and M/s. Keltech Energies Ltd.,as in 2018-19

✯ Royalty Charges : Commerece and Industries based on the notification of department No: MGD/DCB/2020-21, Bengaluru. Dated : 03-07-2020 . Mines & Geology is adopted for the SR 2021-22.

✯ Basic rates for materials which are available in Common SR of PWD Vol-I,II & III are considered. Rates of other materials are obtained from the Chief Engineers of various Zones of WRD for consideration in the SR.

✯ Further provision for the use of manufactured sand as per IS-383-2007 has been continued in the SR 2021-22.

✯ The capital cost of machineries is worked out by considering the percentage variation in WPI of the following commodities:

(1) Manufacture of machinery for mining, quarrying and construction.
(2) Manufacture of metal -forming machinery and machine tools.
(3) Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres over the period 2018-19 to 2021-22.

✯The hire charges for the machineries is worked out based on the capital cost of machineries so arrived.

✯For the preparation of the Schedule of Rates 2021-22,the minimum wages of workers as notified by the Labour Department, Government of Karnataka vide Notification No : KAE/2/LMW/2015 , dated: 06.01.2017 is adopted with current VDA.

✯The VDA payable for the period 01.04.2021 to 31.03.2022 has been revised based on the increase in State average CP index for Industrial workers for 2017 as published by the State Labour Department,vide Notification No: DES/SIP/PWX/04/2021, Bangalore dated: 11.02.2021.

Computation of Variable Dearness Aallowance (VDA):

The state annual average CP index for industrial workers 2017	(CI) :		7953
Base state annual average CP index for industrial workers 2015	(BI) :		5780
Amount of variable DA per point increase in CP index		`	0.04
Difference in Current & Base index	(CI - BI) :		2173

Variable DA / Day = (Difference in index) x (Rate of DA per point) x 30 / 26

Variable DA / Day = (1326) x (0.04) x 30 / 26 ` **101.22/Day**

- For provisions in the data such as Watering charges, formwork, Contractor's profit, overheads,as per the guidelines of Technical Working Group for Common SR are considered. For Other charges the provisions considered in preparation of SR for 2018-19 are continued for preparation of WRD SR for 2021-22.

- Material rates and Machinery rates are exculsive of G.S.T., and are adopted in the S.R. 2021-22 .

- For all items of works, brief descriptions are given in the SR.

- Area Weightages are applicable as in Vol-I ,II & III of PWD common SR .

Sd/-
Chairman,
SR Committee for
WRD Specific Items

GENERAL NOTES ON SCHEDULE OF RATES FOR THE YEAR : 2021-22

1 These general notes are applicable to all chapters of Schedule of Rates to the extent they are relevant.

2 All materials to be used on work shall conform to relevant specifications of Bureau of Indian standards.

3 The basic rates (finished item rates), except otherwise specified, are inclusive of all lead and all lifts

4 For material rates, labour rates, hire charges of machineries and item rates not found in this schedule of rates and available in other volumes of Uniform Schedule of Rates may be referred .

5 The basic rates are inclusive of royalty charges on materials as per Director, Mines and Geology Notification No:MGD/DCB/2020-21 Dt: 03.07.2020.

6 The basic rates are exclusive of cost of site clearance, de-watering, working under watery situation, de-silting, river diversion arrangements and such similar arrangements wherever applicable. For items of work involving de-watering and working under watery situation, the basic rates are to be increased by 2 percent for estimate purpose only.

7 The basic rates are inclusive of cost of all materials including finishing, wastage, machinery, labour, enabling works, contractor's profit , overheads and Labour Welfare fund.

8 The items or equivalent items available in other volumes of Uniform Common SR shall be considered.This SR is prepared for WRD specific items to be considered in case of non availability of items in any other volumes of common SR.

9 Issue Rates: "The prevailing market rates of cement & steel will be assessed and the basic rates shall be approved by the Bangalore circle PWD & published quarterly i.e.1st April, 1st July, 1st October & 1st January whenever the variation in price is more/less than 10% over the previously approved rates". Rates are to be calculated and issued for OPC: PPC, TMT Bars, Mild Steel and Structural Steel etc., The Superintending Engineer shall issue office memorandum with wide publicity and obtain rate from GST registered vendors.

10 For operating : 13 of PWG-65/ Clause : 34 and 35 of KW-4 of the Contract agreement, the basic rates of affected items of Schedule of Rates shall be recast by considering the rates of Cement and Steel at the time of occuance of these items.

11 Useful rubble and stone chips obtained from excavation shall be issued to the contractor for use on works (including enabling works and aggregate crushing) at the rates specified for these materials in the Schedule of Rates. A suitable clause shall be included in the tender in this regard.

12 The basic rates mentioned in Schedule of Rates are exculsive of G.S.T. A Separate provision shall be made while preparing the Estimate by considering G.S.T as applicable and in accordance with the Finance Department Notification prevaling at the time of preparation of Estimate.

GENERAL NOTES ON SCHEDULE OF RATES (contd)

13 A separate area specific loading for the works provided in Volume I of Common SR of PWD shall be considered while preparing the estimate.

14 The M-Sand shall conform to IS code 383 and its latest version. Only M-Sand rates are adopted while preparing the SR of 2021-22.

15 The cement concrete items and in all items where sand is required rates are worked out in this schedule of rates by considering the rate of the manufactured sand. If natural river sand approved by Government is available, specifically required and economical to Government for that work, natural river sand may be used inplace of M- sand and suitable rate analysis should be got approved by the concerned Superintending Engineer.
In case of using blended cement, the instructions in PWD Vol-I, II and III of common SR shall be followed.

16 General instructions and guidelines contained in Vol-I of Common Schedule of Rates is also applicable to this Schedule of Rates to the extent they are relevant.

Sd/-
Chairman,
SR Committee for
WRD Specific Items

SCHEDULE OF RATES FOR WATER RESOURCES DEPARTMENT SPECIFIC ITEMS

FOR THE YEAR : 2021-22

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WATER RESOURCES DEPARTMENT

CHAPTER - WRD:1

SCHEDULE OF RATES
BASIC DATA
FOR THE YEAR : 2021-22

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WRD: 1.1. STATEMENT OF RATES FOR MATERIALS FOR WRD SPECIFIC ITEMS OTHER THAN MATERIAL AVALIABLE IN Vol- I, II & III of PWD SR 2021-22

FOR THE YEAR : 2021-22

Sl No.	DESCRIPTION OF MATERIAL	UNIT	RATE in `.
1	2	3	4
I.	**CONSTRUCTION MATERIALS :**		
1	Acid resisting mortar mix	kg	70.00
2	Acrylic emulsion paint	L	225.00
3	Aluminium beading for glass fixing	m	40.00
4	Binding wire	kg	65.00
5	Bolts / Nuts / Washers (galvanized general purpose)	kg	80.00
6	Bolts / Nuts / Washers (hot dipped galvanized)	kg	100.00
7	Bolts / Nuts / Washers (MS general purpose)	kg	80.00
8	Bolts / Nuts / Washers (stainless steel)	kg	180.00
9	Burnt stone slab 100 mm thick	m^2	450.00
10	Cast iron blocks	kg	60.00
11	Cement concrete solid bricks 40 x 20 x 20 cm	each	55.00
12	Coal tar epoxy paint	L	225.00
13	Copper sheet 16 SWG	kg	475.00
14	Coursed rubble stone 300 x 300 x 450 mm	each	52.00
15	Coursed rubble stone 300 x 300 x 600 mm	each	70.00
16	D - cord	m	15.00
17	De-greasing / de-rusting compound	L	388.50
18	Detonating fuse coil	m	6.63
19	Detonator electric	each	7.08
20	Detonator ordinary	each	3.00
21	Empty cement bag	each	3.00
22	Explosive ANFO high strength booster	kg	60.00
23	Explosive small dia (Kelvex-220 or equivalent)	kg	52.00
24	Manufactured Sand (M-Sand)	m^3	1417.00
25	G.I barbed wire 12 x 12 gauge	kg	72.00
26	G.I chain link mesh 10 gauge 50 x 50 mm opening	m^2	161.25
27	G.I sheet (corrugated) Class-II 1 mm thick	t	66500.00
28	G.I sheet (plain) Class-II 1 mm thick	t	61000.00
29	G.I Stretcher wire	kg	84.00
30	Hectometre stone one line dressed	each	275.00
31	Hemp yarn	kg	94.00
32	Honne wood planks	m^3	64000.00
33	Hume pipe with collar 150 mm dia	m	360.00
34	Hume pipe with collar 300 mm dia	m	735.00
35	Ironite compound	kg	30.00
36	J- Bolts 300 mm long	each	53.00
37	Jungle wood planks	m^3	29611.00

STATEMENT OF RATES FOR MATERIALS (contd)

Sl No.	DESCRIPTION OF MATERIAL	UNIT	RATE in `.
1	2	3	4
I.	**CONSTRUCTION MATERIALS (Contd):**		
38	LDPE sheet 500 micron thick	m^2	120.00
39	LDPE sheet 750 micron thick	m^2	180.00
40	LDPE sheet 1000 micron thick	m^2	235.00
41	M.S pipe 200 / 300 mm dia	kg	65.00
42	M.S pipe 32 mm dia	m	210.00
43	Oxalic acid	L	54.00
44	Plain glass 4 mm thick	m^2	500.00
45	Pre-stressed concrete pipe (18 kg / sqcm test pressure) 1000 mm dia	m	7200.00
46	Pre-stressed concrete pipe (18 kg / sqcm test pressure) 1200 mm dia	m	8700.00
47	Pre-stressed concrete pipe (18 kg / sqcm test pressure) 800 mm dia	m	6000.00
48	PVC sealing strip	m	60.00
49	PVC water stopper 310 mm wide (central bulb type)	m	240.00
50	Rapid wire mesh 50 x 50 mm opening non-galvanized	m^2	161.25
51	Resin bond Cement capsule	each	44.00
52	Rivets	kg	85.00
53	Rolling shutter	m^2	2634.00
54	Rolling shutter top cover	m	648.00
55	Rough stone 200 x 200 x 750 mm	each	39.00
56	Rubber bottom seal for gate (flat type)	m	320.00
57	Rubber corner seal for gate (music note type teflon cladded)	m	1000.00
58	Rubber corner seal for gate (music note type uncladed)	m	370.00
59	Rubber side seal for gates (music note type teflon cladded)	m	1000.00
60	Rubber side seal for gate (music note type uncladed)	m	375.00
61	Rubber side seal for gate (Z type)	m	375.00
62	Size stone 150 to 200 mm height	each	12.00
63	Size stone 200 to 250 mm height	each	13.00
64	Size stone 250 to 300 mm height	each	17.00
65	Shahabad stone slab	m^2	450.00
66	Shalimastic sealing compound	kg	130.00
67	Stainless steel plate / flats	kg	275.00
68	Steel door (frame and Shutter tubular sections)	m^2	6200.00
69	Steel door (frame CRCA sheet Shutter tubular sections)	m^2	5100.00
70	Steel window (tubular frame and tubular section shutter excluding glass)	m^2	3000.00
71	Steel window (tubular frame and Z section shutter excluding glass)	m^2	2250.00
72	Stone chips (Excavated material at work site)	m^3	435.00
73	Stone chips (at quarry)	m^3	570.00
74	Synthetic Enamel paint 1st quality	L	235.00
75	Tarfelt joint filler board 12 mm thick	m^2	350.00
76	Tarfelt joint filler board 20 mm thick	m^2	550.00
77	Through stones 200 x 200 x 300 to 450 mm long	each	19.00
78	Through stones 250 x 250 x 450 to 600 mm long	each	24.00
79	Through stones 300 x 300 x 650 to 750 mm long	each	31.00

STATEMENT OF RATES FOR MATERIALS (contd)

Sl No.	DESCRIPTION OF MATERIAL	UNIT	RATE in `.
1	2	3	4
I.	**CONSTRUCTION MATERIALS (Contd):**		
80	Un-coursed rubble stones(Excavated material at work site)	m^3	360.00
81	Water proofing compound	kg	40.00
82	Welding electrodes 4 mm dia (general purpose)	each	10.00
83	Welding electrodes 4 mm dia (radiographic low hydrogen)	each	21.00
84	Welding electrodes 4 mm dia (stainless steel)	each	62.00
85	Weld mess 100 x 50 mm 10 gauge non-galvanized	m^2	240.00
86	Wire brush	each	50.00
87	Weld mesh 50 x 50 mm 13 gauge	m^2	230.00
88	Wire mesh 20 gauge (50 mm x 50 mm chain link)	m^2	240.00
89	Zinc	kg	245.00
90	Zinc chromate red oxide primer paint	L	115.00
91	Zinc rich epoxy primer paint (zinc content - 90 %)	L	380.00
II.	**MANUFACTURED MATERIALS FOR GATES / HOISTS :**		
1	Cast steel Wheel / Pulley / Hub / Plummer / Roller	kg	170.00
2	Cast steel Drum / Gear	kg	190.00
3	Cast steel Pinion	kg	185.00
4	Forged steel Hook / Shackle	kg	200.00
5	Alloy steel Shaft (Corbon steel)	kg	230.00
6	Alloy steel Pin (Stainless steel)	kg	280.00
7	Bronze-alluminium alloy Bearing / Bush	kg	840.00
III.	**ACCESSORIES FOR MACHINERY / EQUIPMENT :**		
1	Air hose 25 mm dia	m	222.00
2	Air hose 50 mm dia	m	299.00
3	Cardium compound	kg	110.00
4	Casing shoe bit	each	11638.00
5	Diamond core bit BX size	each	13287.00
6	Diamond core bit NX size	each	16841.00
7	Diesel	L	85.00
8	Double tube core barrel	each	15429.00
9	Electric power (HT - 2B category)	Kwhr	9.06
10	Extension rod with coupling sleeve	m	4637.00
11	Gear oil HP-90	L	230.00
12	Grease GEM-RR3	kg	239.00
13	Jack hammer drill rod 1.5 m	each	4401.00
14	Jack hammer drill rod 2.5 m	each	7299.00
15	Lubricant	L	240.00

STATEMENT OF RATES FOR MATERIALS (contd)

Sl No.	DESCRIPTION OF MATERIAL	UNIT	RATE in `.
1	2	3	4
III.	**ACCESSORIES FOR MACHINERY / EQUIPMENT (Contd):**		
16	Nozzle for guniting / sand blasting gun	each	414.00
17	Nylon conveyor belt 3 ply 600 mm width	m	2624.00
18	Nylon conveyor belt 3 ply 1000 mm width	m	4100.00
19	Paving cylinder	each	25641.00
20	Petrol	L	100.00
21	Rails	t	51522.00
22	Reamer shell	each	5700.00
23	Shutter oil	L	35.00
24	Spinning belt	each	11715.00
25	T.C cross bit 100 mm dia	each	4893.00
26	T.C cross bit 50 mm dia	each	10792.00
27	T.C cross bit 75 mm dia	each	13486.00
28	Tyre and tube set for truck	Set	15557.00
29	Water hose (pressure hose)	m	205.00
30	Wire rope (conforming to IS-2266)	kg	176.00

NOTES :

1. The rates provided for materials are exclusive of G.S.T .
2. The rates provided for materials are inclusive of royalty charges wherever applicable.
3. Manufactured Sand shall conform to IS-383-2007 . Further Indian Institute of Science, Bangalore, have conducted tests on use of Manufactured Sand in cement mortars and has concluded that it shall conform to IS- 2116 (Reaffirmed-1998). In this regard the guildlines in circular issued by the Government vide Circular No: PW/72/BMS/2013 dated:31.07.2013 & circular No: PW/518/BMS/2014 dated:30.09.2014,and subsequent circulars and directions issued from the Government from time to time shall be followed.
4. Material rates which are not available in the above list and prevalling in Volumes of other Common Schedule of rates may be reffered.
5. Additional specifications to be included in general conditions of contract for use of manufacutured sand/ artifical sand / fine aggregates shall be as per Appendix-II in volume-I of Uniform Common Schedule of Rates.

WRD: 1.2. STATEMENT OF WAGES OF WORKERS
FOR THE YEAR : 2021-22

Sl No.	CATEGORY OF WORKER	Basic wage / Day in `.	Variable DA / Day	Total wage / Day in `.
		ZONE-I	ZONE-I	ZONE-I
1	2	3	4	5
I.	**SKILLED CATEGORY:**			
1	Electrician (Licensed)	405.00	101.22	506.22
2	Gauge reader	405.00	101.22	506.22
3	Operator Air compressor / DG set	405.00	101.22	506.22
4	Operator Batching plant	405.00	101.22	506.22
5	Operator Bus /Ambulance /Lorry /Tanker	449.00	101.22	550.22
6	Operator Concrete / Asphalt mixer	405.00	101.22	506.22
7	Operator Concrete / Asphalt paver	405.00	101.22	506.22
8	Operator Drilling jumbo / Loco / Winch	405.00	101.22	506.22
9	Operator Grouting /Guniting /Shotcreting	395.00	101.22	496.22
10	Operator Lathe/Drilling/Shearing machine	395.00	101.22	496.22
11	Operator Bending / Planing machine	395.00	101.22	496.22
12	Operator Spillway / Sluice gate	395.00	101.22	496.22
13	Operator Crusher / Conveyor / Mucker	405.00	101.22	506.22
14	Operator Tipper /Dumper Transit mixer	405.00	101.22	506.22
15	Operator Concrete vibrator	395.00	101.22	496.22
16	Operator Vibratory plain / padfoot roller	395.00	101.22	496.22
17	Operator Wagon drill / Drifter	395.00	101.22	496.22
18	Painter Cl- I	405.00	101.22	506.22
19	Spun pipe moulder	405.00	101.22	506.22
20	Struct. steel Fabricator /Marker /Erector	405.00	101.22	506.22
II.	**SEMI SKILLED CATEGORY :**			
1	Helper Air compressor / DG set	395.00	101.22	496.22
2	Helper Batching plant	395.00	101.22	496.22
3	Helper Blaster	395.00	101.22	496.22
4	Helper Bus /Ambulance Lorry /Tanker	395.00	101.22	496.22
5	Helper Concrete / Asphalt mixer	395.00	101.22	496.22
6	Helper Concrete / Asphalt paver	395.00	101.22	496.22
7	Helper Core drilling machine	395.00	101.22	496.22
8	Helper Crane /Tower crane /Cable way	395.00	101.22	496.22
9	Helper Drilling jumbo / Loco / Winch	395.00	101.22	496.22
10	Helper Grouting / Guniting / Shotcreting	395.00	101.22	496.22
11	Helper Jack hammer /Pneumatic tamper	395.00	101.22	496.22
12	Helper Laboratory / Instrumentation	395.00	101.22	496.22
13	Helper Road roller	395.00	101.22	496.22
14	Helper Shovel / Scraper / Dozer	405.00	101.22	506.22
15	Helper Crusher / Conveyor / Mucker	395.00	101.22	496.22

STATEMENT OF WAGES OF WORKERS (contd)

Sl No.	CATEGORY OF WORKER	Basic wage / Day in `.	Variable DA / Day	Total wage / Day in `.
		ZONE-I	ZONE-I	ZONE-I
1	2	3	4	5
II.	**SEMI SKILLED CATEGORY : (contd)**			
16	Helper Tipper / Dumper / Transit mixer	395.00	101.22	496.22
17	Helper Vibrator	395.00	101.22	496.22
18	Helper Vibratory plain / padfoot roller	395.00	101.22	496.22
19	Helper Wagon drill / Drifter	395.00	101.22	496.22
20	Lineman Electric / Telephone	395.00	101.22	496.22
21	Painter Cl- II	395.00	101.22	496.22
22	Valveman / Canal sluice operator	395.00	101.22	496.22
III.	**UN-SKILLED CATEGORY:**			
	Refer PWD SR 2021-22 Vol-I, II & III			
IV.	**OTHER CATEGORY :**			
1	Cartman for double bullock cart	385.00	101.22	486.22
2	Cartman for single bullock cart	385.00	101.22	486.22
3	Diploma Engineer	675.00	101.22	776.22
4	Diver with headgear	405.00	101.22	506.22
5	Graduate Engineer/ Geologist	873.00	101.22	974.22
6	Horticulture Assistant / Photographer	395.00	101.22	496.22
7	Literate mazdoor	425.00	101.22	526.22
8	Telephone / Wireless Operator	465.00	101.22	566.22

WRD: 1.2. STATEMENT OF WAGES OF WORKERS
FOR THE YEAR : 2021-22

Sl No.	CATEGORY OF WORKER	Basic wage / Day in `.		Variable DA / Day	Total wage / Day in `.	
		ZONE-II	ZONE-III	ZONE-II&III	ZONE-II	ZONE-III
1	2	3	4	5	6	7
I.	**SKILLED CATEGORY:**					
1	Electrician (Licensed)	395.00	375.00	101.22	496.22	476.22
2	Gauge reader	395.00	375.00	101.22	496.22	476.22
3	Operator Air compressor / DG set	395.00	375.00	101.22	496.22	476.22
4	Operator Batching plant	395.00	375.00	101.22	496.22	476.22
5	Operator Bus /Ambulance /Lorry /Tanker	437.00	407.00	101.22	538.22	508.22
6	Operator Concrete / Asphalt mixer	395.00	375.00	101.22	496.22	476.22
7	Operator Concrete / Asphalt paver	395.00	375.00	101.22	496.22	476.22
8	Operator Drilling jumbo / Loco / Winch	395.00	375.00	101.22	496.22	476.22
9	Operator Grouting /Guniting /Shotcreting	385.00	360.00	101.22	486.22	461.22
10	Operator Lathe/Drilling/Shearing machine	385.00	360.00	101.22	486.22	461.22
11	Operator Bending / Planing machine	385.00	360.00	101.22	486.22	461.22
12	Operator Spillway / Sluice gate	385.00	360.00	101.22	486.22	461.22
13	Operator Crusher / Conveyor / Mucker	395.00	375.00	101.22	496.22	476.22
14	Operator Tipper /Dumper Transit mixer	395.00	375.00	101.22	496.22	476.22
15	Operator Concrete vibrator	385.00	360.00	101.22	486.22	461.22
16	Operator Vibratory plain / padfoot roller	385.00	360.00	101.22	486.22	461.22
17	Operator Wagon drill / Drifter	385.00	360.00	101.22	486.22	461.22
18	Painter Cl- I	395.00	375.00	101.22	496.22	476.22
19	Spun pipe moulder	395.00	375.00	101.22	496.22	476.22
20	Struct. steel Fabricator /Marker /Erector	395.00	375.00	101.22	496.22	476.22
II.	**SEMI SKILLED CATEGORY :**					
1	Helper Air compressor / DG set	385.00	360.00	101.22	486.22	461.22
2	Helper Batching plant	385.00	360.00	101.22	486.22	461.22
3	Helper Blaster	385.00	360.00	101.22	486.22	461.22
4	Helper Bus /Ambulance Lorry /Tanker	385.00	360.00	101.22	486.22	461.22
5	Helper Concrete / Asphalt mixer	385.00	360.00	101.22	486.22	461.22
6	Helper Concrete / Asphalt paver	385.00	360.00	101.22	486.22	461.22
7	Helper Core drilling machine	385.00	360.00	101.22	486.22	461.22
8	Helper Crane /Tower crane /Cable way	385.00	360.00	101.22	486.22	461.22
9	Helper Drilling jumbo / Loco / Winch	385.00	360.00	101.22	486.22	461.22
10	Helper Grouting / Guniting / Shotcreting	385.00	360.00	101.22	486.22	461.22
11	Helper Jack hammer /Pneumatic tamper	385.00	360.00	101.22	486.22	461.22
12	Helper Laboratory / Instrumentation	385.00	360.00	101.22	486.22	461.22
13	Helper Road roller	385.00	360.00	101.22	486.22	461.22
14	Helper Shovel / Scraper / Dozer	395.00	375.00	101.22	496.22	476.22
15	Helper Crusher / Conveyor / Mucker	385.00	360.00	101.22	486.22	461.22

STATEMENT OF WAGES OF WORKERS (contd)

Sl No.	CATEGORY OF WORKER	Basic wage / Day in `.		Variable DA / Day	Total wage / Day in `.	
		ZONE-II	ZONE-III	ZONE-II&III	ZONE-II	ZONE-III
1	2	3	4	5	6	7
II.	**SEMI SKILLED CATEGORY : (contd)**					
16	Helper Tipper / Dumper / Transit mixer	385.00	360.00	101.22	486.22	461.22
17	Helper Vibrator	385.00	360.00	101.22	486.22	461.22
18	Helper Vibratory plain / padfoot roller	385.00	360.00	101.22	486.22	461.22
19	Helper Wagon drill / Drifter	385.00	360.00	101.22	486.22	461.22
20	Lineman Electric / Telephone	385.00	360.00	101.22	486.22	461.22
21	Painter Cl- II	385.00	360.00	101.22	486.22	461.22
22	Valveman / Canal sluice operator	385.00	360.00	101.22	486.22	461.22
III.	**UN-SKILLED CATEGORY:**					
	Refer PWD SR 2021-22 Vol-I, II & III					
IV.	**OTHER CATEGORY :**					
1	Cartman with double bullock cart	375.00	350.00	101.22	476.22	451.22
2	Cartman with single bullock cart	375.00	350.00	101.22	476.22	451.22
3	Diploma Engineer	675.00	675.00	101.22	776.22	776.22
4	Diver with headgear	395.00	375.00	101.22	496.22	476.22
5	Graduate Engineer/ Geologist	873.00	873.00	101.22	974.22	974.22
6	Horticulture Assistant / Photographer	385.00	360.00	101.22	486.22	461.22
7	Literate mazdoor	415.00	385.00	101.22	516.22	486.22
8	Telephone / Wireless Operator	455.00	425.00	101.22	556.22	526.22

NOTES:

1. The wages under Zone-I are applicable to : Bangalore city agglomeration area and all other corporation agglomeration area .

2 The wages under Zone-II are applicable to : All District headquarters agglomeration area other than those listed in Zone-I.

3 The wages under Zone-III are applicable to: All areas other than those listed in Zone-I & Zone-II.

4 The wages of workmen of various categories are subject to revision during currency of SR for any revision in minimum daily wages and VDA by Govt of Karnataka.

5 The daily rates of wages and VDA of different categories of workers are computed by dividing the total monthly wage by 26.

6 Categories of workers for which provision has not been made in the above list the rates prevailing in the Schedule of rates of other Volumes of Common SR may be adopted.

WRD: 1.3. STATEMENT OF HIRE CHARGES OF MACHINERY

FOR THE YEAR : 2021-22

Sl No:	Description of machinery	Unit	Basic Hire charge in `.	Fuel charge in `.	Crew Charge in `.	Total Hire Charge in `.
1	2	3	4	5	6	7
1	Agitator car / Transit mixer 2 cum	Hour	482.00	1286.00	292.00	2060.00
2	Agitator car / Transit mixer 4 cum	Hour	543.00	1286.00	292.00	2121.00
3	Air compressor 5 cmm electric	Hour	47.00	274.00	183.00	504.00
4	Air compressor 7 cmm diesel	Hour	114.00	1052.00	234.00	1400.00
5	Air compressor 7 cmm electric	Hour	60.00	365.00	183.00	608.00
6	Air compressor 8.5 cmm diesel	Hour	139.00	1315.00	234.00	1688.00
7	Air compressor 8.5 cmm electric	Hour	73.00	456.00	183.00	712.00
8	Air compressor 15 cmm electric	Hour	72.00	1014.00	195.00	1281.00
9	Batching plant 6 cum / hr rated capacity	Hour	87.00	203.00	351.00	641.00
10	Batching plant 15 cum / hr rated capacity	Hour	202.00	365.00	351.00	918.00
11	Batching plant 50 cum / hr rated capacity	Hour	335.00	446.00	351.00	1132.00
12	Bending machine	Hour	26.00	122.00	144.00	292.00
13	Concrete bucket 1.5 cum	Hour	8.00	7.00	---	15.00
14	Concrete hand mixer 45 / 30 ltr	Hour	7.00	5.00	---	12.00
15	Concrete mixer 300 / 200 ltr diesel	Hour	29.00	117.00	244.00	390.00
16	Concrete mixer 300 / 200 ltr (ele)	Hour	27.00	41.00	244.00	312.00
17	Concrete mixer 600 / 400 ltr diesel	Hour	58.00	234.00	244.00	536.00
18	Concrete mixer 600 / 400 ltr (ele)	Hour	53.00	81.00	244.00	378.00
19	Concrete paver 100 sqm / hr	Hour	190.00	24.00	468.00	682.00
20	Convey mucker	Hour	501.00	282.00	195.00	978.00
21	Core drilling machine	Hour	172.00	351.00	288.00	811.00
22	Diesel generating set 30 KVA	Hour	44.00	935.00	146.00	1125.00
23	Diesel generating set 50 KVA	Hour	70.00	1403.00	146.00	1619.00
24	Diesel loco 45 hp	Hour	163.00	789.00	183.00	1135.00
25	Dewatering pump 5 hp diesel	Hour	5.00	117.00	119.00	241.00
26	Dewatering pump 5 hp electric	Hour	2.00	41.00	89.00	132.00
27	Dewatering pump 10 hp diesel	Hour	8.00	234.00	119.00	361.00
28	Dewatering pump 10 hp electric	Hour	3.00	81.00	89.00	173.00
29	Dewatering pump 20 hp diesel	Hour	19.00	468.00	119.00	606.00
30	Dewatering pump 20 hp electric	Hour	7.00	162.00	89.00	258.00
31	Drilling jumbo	Hour	273.00	63.00	195.00	531.00
32	Dumper 5.00 cum	Hour	392.00	589.00	234.00	1215.00
33	Geophysical Ele.resistivity meter	Hour	43.00	---	---	43.00
34	Grouting pump	Hour	13.00	41.00	288.00	342.00
35	Guniting / sand blasting equipment	Hour	58.00	12.00	240.00	310.00
36	Mobile crane 8 t	Hour	288.00	1052.00	252.00	1592.00
37	Mobile crane 25 t	Hour	2646.00	2922.00	242.00	5810.00
38	Needle vibrator 40 mm dia. petrol	Hour	5.00	28.00	173.00	206.00
39	Pile boring rig with accessories	Hour	719.00	2104.00	244.00	3067.00

STATEMENT OF HIRE CHARGES OF MACHINEY (contd)

Sl No	Description of machinery	Unit	Basic Hire charge in `.	Fuel charge in `.	Crew Charge in `.	Total Hire Charge in `.
1	2	3	4	5	6	7
40	Planing machine	Hour	59.00	122.00	230.00	411.00
41	Plate shearing machine	Hour	42.00	162.00	144.00	348.00
42	Pneumatic placer 0.5 cum	Hour	93.00	5.00	93.00	191.00
43	Pneumatic tamper	Hour	8.00	7.00	292.00	307.00
44	Pug cutting machine	Hour	11.00	4.00	---	15.00
45	Pusher leg	Hour	5.00	5.00	---	10.00
46	Road roller diesel 10 t	Hour	156.00	1052.00	236.00	1444.00
47	Shovel 0.50 cum 75 hp	Hour	499.00	701.00	248.00	1448.00
48	Shovel 0.85 cum 110 hp	Hour	826.00	1286.00	248.00	2360.00
49	Spinning machine	Hour	26.00	122.00	144.00	292.00
50	Stationary derric crane	Hour	45.00	12.00	---	57.00
51	Tipping tub 1.5 cum	Hour	21.00	12.00	---	33.00
52	Tower crane 5 tonne	Hour	666.00	211.00	195.00	1072.00
53	Transformer 250 KVA	Month	2324.00	---	---	2324.00
54	Truck 10 t	Hour	226.00	442.00	189.00	857.00
55	Upright drilling machine / Grinder	Hour	13.00	41.00	180.00	234.00
56	Ventilation fan 20 hp	Hour	4.00	162.00	31.00	197.00
57	Vibrating plate compactor (diesel)	Hour	38.00	117.00	292.00	447.00
58	Vibratory pad foot roller 8 t	Hour	786.00	1519.00	288.00	2593.00
59	Waggon drill	Hour	148.00	12.00	288.00	448.00
60	Water tanker 8000 ltr	Hour	225.00	442.00	189.00	856.00
61	Winch 35 hp electric	Hour	68.00	284.00	292.00	644.00

NOTES:

1. Hire charges include depriciation, interest, repair charges, miscellaneous charges, insurance and road tax wherever applicable.
2. Fuel charges include cost of diesel / petrol / electric power as applicable and oil / lubricants and other miscellaneous charges.
3. Crew charges include wages of operator and helper on hourly basis.

   For the purpose of working out wages of crew on hourly basis the daily wages are converted to yearly wages by multiplying the daily wages with (26 daysx12 months).

   The yearly wage is then divided by yearly usage of machinery in hours to get hourly wages of operating crew.

4. Hire / Fuel / Crew charges are exclusive of provisions towards , profit, overheads. Profit shall be, considered only on fuel and operating crew charges.

5. Hire charges of machineries for which are not available in the above list and prevailng in Volume-I,II & III of Common Schedule of rates may be reffered.

WRD: 1.4.2. CONVEYANCE CHARGES FOR MATERIALS BY ANY MODE FOR THE YEAR : 2021-22

Refer Volume I, II & III of PWD Common SR 2021-22

Conveyance Charges for materials including loading and unloading is to be considered for the following nature of works only.

i) Dismantled/ demolished remains of any structures, stacks of silt, fallen muck from canal beds, tanks & reserviors to be cleared from the site subject to specific certification by the concerned Superintending Engineer for disposal.

WATER RESOURCES DEPARTMENT

CHAPTER - WRD:2

DAM AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

CONTENTS **PAGES**

STATEMENT OF REQUIREMENT OF MATERIALS	21 -- 22
SCHEDULE OF RATES FOR ITEMS	23 -- 32

WRD: 2. DAM AND ALLIED WORKS
QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Cement kg	Sand / FA m^3	CA m^3	Steel kg
2.6.1	Consolidation grouting	t	1010.00	---	---	---
2.6.2	Curtain grouting	t	1010.00	---	---	---
2.8.	25 mm dia. dowel rod 3 m long	each	3.00	---	---	11.85
2.9.	25 mm dia. anchor rod 2.75 m long	each	2.50	---	---	10.90
2.10.	Reinforcement steel	t	---	---	---	1025.00
			Cement kg	Sand / FA m^3	CA m^3	Plums m^3
2.11.	M-15 CC using 80 mm down CA for PCC	m^3	210.00	0.378	0.98	---
2.12.	M-10 CC using 80 mm down CA for PCC	m^3	190.00	0.380	0.98	---
2.13	M-20 CC using 40 mm down CA gallery	m^3	300.00	0.380	0.85	---
2.14	M-15 CC using 40 mm down CA for PCC	m^3	240.00	0.420	0.86	---
2.15	M-15 plum CC using 40 mm down CA	m^3	200.00	0.370	0.96	0.22
2.16	Porous CC body drain	m	179.70	---	0.44	---
2.17.1	M-20 CC using 20 mm CA solid parapet	m	81.80	0.101	0.18	---
2.17.2	M-20 CC 20 mm CA ornamental parapet	m	71.40	0.090	0.16	---
			Cement kg	Sand / FA m^3	CA m^3	Hume Pipe kg
2.19	Hume pipe with porous CC for weep hole	m	1.10	0.007	0.003	32.00
			Cement kg	Sand / FA m^3	Stones m^3	Steel kg
2.29	Guniting 25 mm thick in CM 1:3 propn	m^2	17.10	0.031	---	---
2.34	Impervious hearting embankment	m^3	1.26	---	---	---
2.35	Cut-off trench filling	m^3	1.26	---	---	---
2.36	Semi-pervious embankment	m^3	1.26	---	---	---
2.37	Semi-pervious casing	m^3	1.26	---	---	---
2.38	Homogeneous embankment	m^3	1.26	---	---	---
2.39	Filling adjecent to structures	m^3	1.26	---	---	---
2.40	Rockfill embankment	m^3	---	---	---	1.02
2.41	Rock toe (stones from quarry)	m^3	---	---	---	1.02
2.42	Rock toe (stones from dump yard)	m^3	---	---	---	1.02

QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
			Cement kg	Sand / FA m^3	CA m^3	Pipe / Steel kg
2.43	Open jointed hume pipe in rock-toe	m	---	---	---	80 / ---
2.44	RCC manhole in rock-toe	Each	1313.00	2.000	3.62	80 / 160
			Soil m^3	Sand m^3	CA m^3	Stones m^3
2.45	Cross filter drain	m^3	---	0.485	0.54	---
2.46.1	Vertical / Inclined filter - Sand layer	m^3	---	1.020	---	---
2.46.2	Vertical / Inclined filter - 10 mm CA layer	m^3	---	---	1.02	---
2.46.3	Vertical / Inclined filter - 20 mm CA layer	m^3	---	---	1.02	---
2.46.4	Vertical / Inclined filter - 40 mm CA layer	m^3	---	---	1.02	---
2.46.5	Vertical / Inclined filter - 80 mm CA layer	m^3	---	---	1.02	---
2.47	Filter below / behind rock toe	m^3	---	0.240	0.78	---
2.48	Filter using filter fabric and 20 mm CA	m^3	---	---	0.41	---
2.49	Sand chimney filter drain	m^3	---	1.050	---	---
2.50	Transition filter 900 mm thick	m^3	---	0.340	0.68	---
2.51	600 mm revetment with 450 mm filter	m^2	---	0.153	0.31	0.70
2.52	600 mm revetment with 600 mm filter	m^2	---	0.204	0.41	0.70
2.53	600 mm riprap with 450 mm filter	m^2	---	0.153	0.31	0.70
2.54	750 mm riprap with 450 mm filter	m^2	---	0.153	0.31	0.88
2.55	900 mm riprap with 450 mm filter	m^2	---	0.153	0.31	1.05

NOTES:

`1. The basic rates for item No. 2.17.1 & 2.17.2 in this chapter are inclusive of form work, centering and scaffolding charges. Other cement concrete items are exclusive of form work. Hence additionalities for form work, centering and scaffolding pertaining cement concrete Items other than item No.2.17.1 and 2.17.2 in this chapter shall be added to the finished item rates as per the Appendix -I of volume -I of Uniform Common SR.

WRD: 2. DAM AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	EXCAVATION & FOUNDATION TREATMENT WORKS:		
WRD: 2.1.	Excavation for foundation in **hard rock of all toughness** including boulders above 0.6 m diameter (0.113 cum) **for dam, spillway, intake structure, surface power house** and other appurtenant structures by approved **controlled blasting methods** including control of vibration by use of delay detonators and control of fly rocks by muffling arrangements etc., and placing the excavated rock neatly in specified dump area as directed including cost of all materials, machinery, labour etc., complete **with all lead and all lifts.**	m^3	**688.00**
WRD: 2.2.	**Preparing foundation bed for masonry or concrete** by removing all loose material by wedging / chiselling and disposing off the same as directed and cleaning the surface with air and water jet including cost of all materials, machinery, labour etc., complete with all **lead and all lifts.**	m^2	**45.00**
WRD: 2.3.	**Preparing foundation bed for cut-off trench filling** in rock portion by removing all loose material by wedging / chiselling and disposing off the same as directed etc., complete with all leadand all lifts.	m^2	**34.00**
WRD: 2.4.	**Drilling 50 mm dia. holes** vertical or inclined upto 10 degrees to vertical in rock / masonry / concrete by percussion drilling method using waggon drill or any other suitable equipment including cost of all materials, machinery, labour, redrilling through partially set grout wherever required etc., complete.		
2.4.1.	Upto **6 m** from surface.	m	**315.00**
2.4.2.	Beyond **6 m upto 12 m** from surface.	m	**346.00**
2.4.3.	Beyond **12 m upto 18 m** from surface.	m	**381.00**
2.4.4.	Beyond **18 m upto 24 m** from surface.	m	**419.00**
2.4.5.	Beyond **24 m upto 30 m** from surface.	m	**461.00**
2.4.6.	Beyond **30 m upto 36 m** from surface.	m	**507.00**
2.4.7.	Beyond **36 m upto 42 m** from surface.	m	**557.00**
2.4.8.	Beyond **42 m upto 48 m** from surface.	m	**613.00**
Note:	The item rate for drilling through rock / masonry / concrete includes redrilling through partially set grout, if any, in the portion of the hole already drilled and grouted.		
WRD: 2.5.	**Flushing grout holes** of all sizes with water and air jets alternatively for an average period of 30 minutes and observing water intake after flushing including cost of all materials, machinery, labour etc.,complete.	m	**59.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 2.6.1.	**Consolidation grouting** with neat cement grout mix of suitable consistency under specified grout pressure as directed in drilled holes by stage grouting method including cost of all materials, machinery, labour, redrilling if necessary etc., complete with all lead and all lifts.	**t**	**13544.00**
WRD: 2.6.2.	**Curtain grouting** with neat cement grout mix of suitable consistency under specified grout pressure as directed in drilled holes by stage grouting method including cost of all materials, machinery, labour, redrilling if necessary etc., **complete with all lead and all lifts.**	**t**	**14804.00**
WRD: 2.7.	**Providing and fixing up-heaval gauge** with all accessories as per specifications excluding cost of drilling holes including cost of all other materials, machinery, labour, equipments etc., complete.	**each**	**14820.00**
WRD: 2.8.	Providing and fixing 25 mm dia 3 m long cold twisted deformed steel **dowel bars** with one end driven into 38 mm dia 1.50 m deep hole drilled in bed rock and other end provided with L - bend for embedding **in** concrete / masonry of **over flow / non-over flow blocks** and other appurtenant works including cost of all materials, machinery, labour, drilling and cleaning hole, filling hole with thick cement slurry, driving anchor rod etc., **complete with all lead and all lifts.**	**each**	**1272.00**
WRD: 2.9.	Providing and fixing 25 mm dia 2.75 m long ribbed steel **anchor rods** with one end split and driven firmly using steel wedge into 1.25 m deep 38 mm dia. hole drilled **in bed rock** and other end provided with L-bend for embedding in concrete / masonry for spillway and appurtenant works including cost of all materials, machinery, labour, steel wedge, drilling and cleaning hole, filling hole with thick cement slurry, driving anchor rod etc., **complete with all lead and all lifts.**	**each**	**1219.00**
	REINFORCEMENT & CEMENT CONCRETE WORKS : (Should be read along with Note in this chapter P.No: 22)		
WRD: 2.10.	Providing, fabricating and placing in position **steel reinforcement bars** for RCC structures including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, lapping /welding joints wherever required, tying with 1.25 mm dia. soft annealed steel wire etc., **complete with all lead and lifts .**	**t**	**84321.00**
WRD: 2.11.	Providing and laying in-situ vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete using 80 mm down** approved, clean, hard, graded aggregates **for plain concrete works** including cost of all materials, machinery, labour, formwork, centering, scaffolding, cleaning, providing mortar layer for lift joints, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., **complete with all lead and lifts .**	**m^3**	**5773.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 2.12.	Providing and laying in-situ vibrated **M-10** (28 days cube compressive strength not less than 10 N / sq mm) **grade cement concrete using 80 mm down** approved, clean, hard, graded aggregates **for plain concrete works** including cost of all materials, machinery, labour, formwork, centering, scaffolding, cleaning, providing mortar layer for lift joints, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., **complete with all lead and lifts .**	**m^3**	**5601.00**
WRD: 2.13.	Providing and laying in-situ vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm down** approved, clean, hard, graded aggregates **for RCC works of gallery, sluice, spillway crest, spillway d / s face, energy dissipating structures, training walls, piers, abutments** and such other locations including cost of all materials,machinery,labour,formwork, centering, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., **complete with all lead and lifts**	**m^3**	**6032.00**
WRD: 2.14.	Providing and laying in-situ vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete using 40 mm down** approved, clean, hard, graded aggregates **for plain concrete works** including cost of all materials, machinery, labour, formwork, centering, scaffolding, cleaning, providing mortar layer for lift joints, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., **complete with all lead and lifts.**	**m^3**	**5831.00**
WRD: 2.15.	Providing and laying in-situ vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete using 40 mm down** approved, clean, hard, graded aggregates with placing and **sinking plums** of size 150 to 80 mm upto 15 percent **for gravity type structures** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., **complete with all lead and lifts.**	**m^3**	**5556.00**
WRD: 2.16.	Providing and forming **porous (with out sand) concrete body drains** of size 685 x 685 mm with 230 mm diameter central hole using cement and 20 mm down approved, clean, hard, graded coarse aggregate **in 1 : 3.50** proportion by volume including cost of all materials, machinery, labour, formwork, batching, mixing, placing in position, tamping, curing etc., **complete with all lead and lifts.**	**m**	**2937.00**
WRD: 2.17.1.	Providing and laying in-situ vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete using 20 mm down** approved, clean, hard, graded aggregates **for RCC solid parapet** consisting of 350 x 200 mm kerb, 350 x 350 x 1000 mm pillars spaced approximately at 3.35 m c / c, 125 mm thick wall 800 mm height		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	with 125 mm thick and 350 mm wide coping slab for wall and 125 mm thick 400 x 400 mm coping for pillars with top edges of kerb and coping chamferred/rounded as directed including cost of all materials,machinery, labour, formwork, centering, cleaning, scaffolding, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete (excluding cost of providing and placing reinforcement steel and gate) with all **lead and all lifts.** (Refer Note in this chapter for additionalities of form work)	**m**	**3202.00**
WRD: 2.17.2.	Providing and laying in-situ vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete using 20 mm down** approved, clean, hard, graded aggregates **for RCC ornamental parapet** consisting of 350 x 200 mm kerb, 350 x 350 x 1000 mm pillars spaced approximately at 3.5 m apart, 200 x 150 mm posts 800 mm height approximately 300 mm c / c with 125 mm thick and 350 mm wide coping slab for posts 400 x 400 x 125 cm coping slab for pillars with top edges of kerb and coping chamferred or rounded as directed including cost of all materials, machinery, labour, formwork, centering, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete (excluding cost of providing and placing reinforcement steel and gate)**with all lead and all lifts**. (Refer Note in this chapter for additionalities of form work)	**m**	**3338.00**
WRD: 2.18.	**Pre-cooling** to control placement temperature of cement concrete in the range of 18 to 21° C at the concrete placement point by inundation of coarse aggregates by circulating normal water and using flaked ice and water chilled upto 4° C for mixing concrete including cost of all materials, machinery, labour etc., complete **with all lead and lifts.**	**m^3**	**100.00**
WRD: 2.19.	Providing and constructing 150 mm dia **hume pipe weep holes** for concrete /masonry walls including cost of all materials,machinery,labour, providing 200 x 200 x 200 mm size porous concrete block made of cement and 20 mm down coarse aggregate in 1 : 4 proportion by volume with 100 mm thick sand backing at the junction of wall and soil back fill etc., complete **with all lead and lifts.**	**m**	**544.00**
WRD: 2.20.	Providing and forming **expansion joint** for spillway bridge consisting of 75 x 75 x 6 mm angles 2 numbers provided with 250 mm long 12 mm dia. anchors fixed to both flanges at 150 mm c / c and 140 x 6 mm plate welded on top of one of the angle including cost of all materials, labour, machinery, providing and fixing 38 mm thick joint filler board matching the thickness of wearing coat, painting etc., conplete with **all lead all lifts.**	**m**	**2493.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	MASONRY & GUNITING WORKS :		
WRD: 2.21.	Providing and constructing **un-coursed rubble stone masonry** using approved stones in **cement mortar 1 : 3** proportion by volume including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, packing mortar and wedging stone chips into joints, curing etc.,complete with **all lead and all lifts.**	**m^3**	**4832.00**
WRD: 2.22.	Providing and constructing **un-coursed rubble stone masonry** using approved stones in **cement mortar 1 : 4** proportion by volume including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, packing mortar and wedging stone chips into joints, curing etc.,complete with **all lead and all lifts.**	**m^3**	**4527.00**
WRD: 2.23.	Providing and constructing **coursed rubble face stone masonry** using approved stones in **cement mortar 1 : 3** proportion by volume including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, packing mortar and wedging stone chips into joints, curing etc.,complete with **all lead and all lifts.**	**m^3**	**5255.00**
WRD: 2.24.	Providing and constructing **coursed rubble face stone masonry** using approved stones in **cement mortar 1 : 4** proportion by volume including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, packing mortar and wedging stone chips into joints, curing etc.,complete with **all lead and all lifts.**	**m^3**	**4975.00**
WRD: 2.25.	Providing and constructing **chisel drafted and hammer dressed face stone masonry** using approved stones in **cement mortar 1 : 3** proportion by volume including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, packing mortar and wedging stone chips into joints, curing etc. complete with **all lead and all lifts.**	**m^3**	**5438.00**
WRD: 2.26.	Providing and constructing **chisel drafted and hammer dressed face stone masonry** using approved stones in **cement mortar 1 : 4** proportion by volume including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, packing mortar and wedging stone chips into joints, curing etc. complete with **all lead and all lifts.**	**m^3**	**5167.00**
WRD: 2.27.	Providing 50 mm deep **cement mortar pointing** to face stone masonry **in CM 1 : 2** proportion by volume including cost of all materials, labour, raking-out and cleaning joints, pressing mortar into joints, scaffolding, finishing, curing etc., complete with **all lead and all lifts.**	**m^2**	**169.00**
Note:	If waterproofing compound is added to cement mortar add	**m^2**	**4.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 2.28.	Providing 50 mm deep **cement mortar pointing** to face stone masonry **in CM 1 : 3** proportion by volume including cost of all materials, labour, raking-out and cleaning joints, pressing mortar into joints, scaffolding, finishing, curing etc., complete with **lead upto 1 km and all lifts.**	**m^2**	**160.00**
Note:	If waterproofing compound is added to cement mortar add	**m^2**	**3.00**
WRD: 2.29.	Providing 25 mm thick **guniting** to rock or masonry surface **in cement mortar 1 : 3** proportion by weight including cost of all materials, machinery, labour, raking-out and cleaning joints, scaffolding wherever required, curing and all other ancillary operations etc., complete with **with all lead and lift.**	**m^2**	**602.00**
	CONTRACTION JOINT WORKS:		
WRD: 2.30.	Providing and constructing **contraction joints** by fixing 6 SWG 600 mm wide annealed **copper sheets in two lines** with 8 mm dia. steel dowel rods on either side at one metre interval, forming 125 x 125 mm size groove in between copper strips for filling asphalt, fixing 15 mm dia two legged G.I pipe with U-bend at bottom for circulation of steam at intervals and forming 150 mm dia formed drain behind water seals including cost of all materials, machinery, labour, filling asphalt in groove, circulation of steam through pipe, etc., complete with **all leads and lifts**	**m**	**12283.00**
WRD: 2.31.	Providing and constructing **contraction joints** by fixing 310 mm wide central bulb type approved quality **PVC water stop in two lines** with 8 mm dia. steel dowel rods on either side at 1 m interval, forming 125 x 125 mm size groove in between two water stops for fillinf asphalt, fixing 15 mm dia two legged G.I pipe with U-bend at bottom for circulating steam at interval and forming 150 mm dia formed drain behind water seals including cost of all materials, machinery, labour, filling asphalt in groove, circulation of steam through pipes, vulcanizing water seal joints etc., complete with **all leads and lifts.**	**m**	**2292.00**
WRD: 2.32.	Providing and constructing **contraction joints** by fixing 16 SWG 600 mm wide annealed **copper sheets in single line** with 8 mm dia steel dowel rods on either side at 1 metre interval including cost of all materials, machinery, labour, brazing copper sheet joints etc., complete with **all leads and lifts.**	**m**	**5455.00**
WRD: 2.33.	Providing and constructing **contraction joints** by fixing 230 mm wide central bulb type **PVC water stop in single line** supported by 10 mm dia. steel dowel rods on either side at 1 metre interval including cost of all materials, machinery, labour, vulcanizing water seal joints etc., complete with **all leads and lifts.**	**m**	**521.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	EARTH / ROCKFILL EMBANKMENT WORKS :		
WRD: 2.34.	Providing **hearting** embankment **using selected approved impervious soil from borrow** areas in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting to **density control of not less than 95 percent** using **power roller etc., complete with all lead and all lifts.**	**m^3**	**458.00**
WRD: 2.35.	Providing **cut-off trench filling using selected approved impervious soil from borrow areas** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting to **density control of not less than 95 percent** using **power roller etc., complete with all lead and all lifts.**	**m^3**	**468.00**
WRD: 2.36.	Providing **casing embankment using approved semi-pervious soil borrow areas** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting to **density control of not less than 95 percent** using **power roller etc., complete with all lead and all lifts.**	**m^3**	**471.00**
WRD: 2.37.	Providing **casing embankment using semi-pervious soil available from excavation** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting to **density control of not less than 95 percent** using **power roller etc., complete with all lead and all lifts.**	**m^3**	**199.00**
WRD: 2.38.	Providing **homogeneous embankment using homogeneous approved soil from borrow area** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges /sides, watering, compacting to **density control of not less than 95 percent using power roller etc., complete with all lead and all lifts.**	**m^3**	**459.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 2.39.	Providing **impervious embankment adjacent to masonry / concrete structure** and **filling trial pits using impervious approved soil from borrow area** in layers of 100 to 150 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, picking previous layer, spreading soil in layer of specified thickness, sorting-out, breaking clods, levelling, sectioning edges / sides, watering, compacting to **density control of not less than 95 percent** using pneumatic tampers / vibrating earth rammers **etc., complete with all lead and all lifts.**	**m^3**	**548.00**
WRD: 2.40.	Providing and constructing **rockfill embankment using 300 mm down graded stones** and quarry spalls from approved source including cost of all materials, machinery, labour, spreading stones and spalls in layers, hand packing, wedging,finishing the surface to required slopes as per approved drawings etc., complete with **lead upto 1 km and all lifts.**	**m^3**	**464.00**
WRD: 2.41.	Providing and constructing **dry rubble rock-toe using rubble and stone chips from approved source** including cost of all materials, machinery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes as per approved drawings etc. complete with **lead and all lifts.**	**m^3**	**783.00**
WRD: 2.42.	Providing and constructing **dry rubble rock-toe using rubble and stone chips from dump yard** including cost of all materials, machinery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes as per approved drawings etc., complete with **all lead and all lifts.**	**m^3**	**805.00**
WRD: 2.43.	Providing and laying 300 mm diameter **open jointed hume pipes with collars** in rock-toe for drainage including cost of all materials, machinery, labour etc., complete **with all lead and all lifts.**	**m**	**943.00**
WRD: 2.44.	Providing and constructing 1.20 m internal diameter and average 3 m height **RCC manhole** consisting of 200 mm thick bed / sides / top slab / 1.5 m long cut-off wall all reinforced with 12 mm dia bars at 300 mm c / c bothways, 600 mm dia and 75 mm thick top cover reinforced with 8 mm dia bars at 150 mm c/c bothways,12 mm dia rungs at specified intervals, 300 mm dia hume pipe out-let etc., **in M-15** (28 days cube compressive strength not less than 15 N / sqmm) **grade cement concrete** using 20 mm down approved clean , hard, graded aggregates including cost of all materials, machinery, labour, excavation for foundation, formwork, scaffolding, fabricating and placing reinforcement steel, batching, mixing, laying and vibrating concrete, finishing, curing etc., complete as per approved drawings with **all lead and all lifts.**	**each**	**45112.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	FILTER & PITCHING WORKS :		
WRD: 2.45.	Providing and constructing **longitudinal / cross graded filter drains using sand, 80mm to 20 mm and 20 mm down** clean, hard graded aggregates from approved source satisfying specified filter creteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compaction etc., complete as per **specifications and approved drawings with all lead and lifts.**	**m^3**	**1862.00**
WRD: 2.46.	Providing and constructing **vertical /inclined graded filter** media **using** clean, hard graded **sand and coarse aggregates** from approved source satisfying specified filter creteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compacting etc., complete as per specifications and approved drawings complete **with all lead and lifts.**		
2.46.1	**Sand layer.**	**m^3**	**1960.00**
2.46.2	**10 mm down graded coarse aggregate layer**	**m^3**	**1830.00**
2.46.3	**20 mm down graded coarse aggregate layer**	**m^3**	**1830.00**
2.46.4	**40 mm down graded coarse aggregate layer**	**m^3**	**1728.00**
2.46.5	**80 mm down graded coarse aggregate layer**	**m^3**	**1658.00**
WRD: 2.47.	Providing and constructing **graded filter media below and behind rock-toe** consisting of 200 mm thick sand, 250 mm thick 20 to 4.75 mm and 400 mm thick 80 to 20 mm clean, hard, graded coarse aggregates from approved source satisfying specified filter creteria including cost of all materials, machinery, labour, laying to required thickness and slope, compacting etc., complete as per specifications and approved drawings complete **with all lead and lifts.**	**m^3**	**1754.00**
WRD: 2.48.	Providing and laying **filter media** consisting of two layers of 250 gsm poly-propeline non-woven **filter fabric** with 400 mm thick **20 mm down** clean, hard, graded **coarse aggregate** in between for vertical / inclined / horizontal filter blanket for embankment including cost of all materials, machinery, labour etc., complete with all lead for aggregate complete **with all leads and lifts.**	**m^2**	**1348.00**
WRD: 2.49.	Providing and constructing 450 mm thick **chimney filter using** clean approved sand satisfying specified filter creteria including cost of all materials, machinery, labour, compacting etc., complete with all **lead and all lifts.**	**m^3**	**1990.00**
WRD: 2.50.	Providing and constructing 900 mm thick **transition cum filter media** behind rockfill **using sand, 80mm to 20 mm and 20 mm down** clean, hard, graded aggregates from approved source satisfying specified filter creteria in layers of 300 mm thickness each including cost of all		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	materials, machinery, labour, laying each layer to required slope, compacting etc., complete as per specifications and approved drawings complete **with all lead and lifts.**	**m^3**	**1827.00**
WRD: 2.51.	Providing and constructing 600 mm thick **hand packed rough stone revetment** with 650 to 750 mm long through stones at 1.50 m c / c **over 450 mm thick graded filter** media backing consisting of sand, 10 mm down and 40 mm down approved clean, hard, graded aggregates laid in layers of 150 mm thick each including cost of all materials for revetment and filter, machinery, labour, laying to required slopes as per approved drawings, packing and wedging with stone chips, finishing surface etc., **complete with all lead and lifts.**	**m^2**	**1668.00**
WRD: 2.52.	Providing and constructing 600 mm thick **hand packed rough stone revetment** with 650 to 750 mm long through stones at 1.50 m c / c **over 600 mm thick graded filter** media backing consisting of sand, 10 mm down and 40 mm down approved clean, hard, graded aggregates laid in layers of 200 mm thick each including cost of all materials for revetment and filter, machinery, labour, laying to required slopes as per approved drawings, packing and wedging with stone chips, finishing surface etc., complete **with all lead and lifts**.	**m^2**	**1944.00**
WRD: 2.53.	Providing and constructing **600 mm thick hand packed rough stone riprap over 450 mm thick graded filter** media backing consisting of sand, 10 mm down and 40 mm down approved clean, hard, graded aggregates laid in layers of 150 mm thick each including cost of all materials for riprap and filter media, machinery, labour, laying to required slopes as per approved drawings, packing and wedging with stone chips **etc.,complete with all lead and lifts.**	**m^2**	**1618.00**
WRD: 2.54.	Providing and constructing **750 mm thick hand packed rough stone riprap over 450 mm thick graded filter** media backing consisting of sand, 10 mm down and 40 mm down approved clean, hard, graded aggregates laid in layers of 150 mm thick each including cost of all materials for riprap and filter media, machinery, labour, laying to required slopes as per approved drawings, packing and wedging with stone chips **etc.,complete with all lead and lifts.**	**m^2**	**1812.00**
WRD: 2.55.	Providing and constructing **900 mm thick hand packed rough stone riprap over 450 mm thick graded filter** media backing consisting of sand, 10 mm down and 40 mm down approved clean, hard, graded aggregates laid in layers of 150 mm thick each including cost of all materials for riprap and filter media, machinery, labour, laying to required slopes as per approved drawings, packing and wedging with stone chips **etc.,complete with all lead and lifts.**	**m^2**	**2016.00**

WATER RESOURCES DEPARTMENT

CHAPTER - WRD:3

CANAL AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

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WRD: 3. CANAL AND ALLIED WORKS
QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Steel kg	Soil m^3	Sand m^3	Stones m^3
	Using soil from Borrow area :					
3. 2	Impervious hearting (Borrow area soil)	m^3	---	1.26	---	---
3.3	Semi-pervious casing (Borrow area soil)	m^3	---	1.26	---	---
3.4	Homogeneous embankment(Borrow area	m^3	---	1.26	---	---
	Using soil from Dump area :					
3.5	Impervious hearting (Dump area soil)	m^3	---	1.26	---	---
3.6	Semi-pervious casing (Dump area soil)	m^3	---	1.26	---	---
	Using soil from Canal excavation :					
3.7	Impervious hearting (Canal excavation)	m^3	---	1.26	---	---
3.8	Semi-pervious casing (Canal excavation)	m^3	---	1.26	---	---
3.9	Embankment for field channel	m^3	---	1.26	---	---
			Steel kg	Soil m^3	Sand m^3	Stones m^3
3.10	Rubble and sand filling	m^3	---	---	0.410	1.02
3.11	Rubble and murum filling	m^3	---	0.41	---	1.02
3.12	250 mm thick Sand blanket	m^2	---	---	0.255	---
			Steel kg	Stone/chips m^3	Sand m^3	CA m^3
3.13	Rock-toe	m^3	---	1.170	---	---
3.14	Longitudinal & cross drains	m^3	---	---	0.783	0.236
3.15	Inclined filter	m^3	---	---	0.612	0.408
3.16	Filter behind & below rock-toe	m^3	---	---	0.340	0.679
3.17.1	Filter using filter fabric 200 gsm	m^2	---	---	---	0.205
3.17.2	Filter using filter fabric 250 gsm	m^2	---	---	---	0.205
			Steel kg	Soil m^3	Sand m^3	Stones m^3
3.18	Rockfill casing (stone from quarry)	m^3	---	---	---	1.15
3.19	Rockfill casing (dump yard stones)	m^3	---	---	---	1.15
3.2	CNS lining 95 % density (borrow area)	m^3	---	1.26	---	---
3.21	CNS lining 95 % density (excavation)	m^3	---	1.26	---	---
3.22	200x200x750 mm Canal bed level stone	each	---	---	---	0.03
3.23	Reinforcement steel	kg	1.025	---	---	---

QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Slab m^3	Cement m^3	Sand m^3	CA m^3
3.24.1	80 mm th. M-15 CC 20 mm CA by paver	m^2	---	23.60	0.041	0.067
3.24.2	100 mm th. M-15 CC 20 mm CA by paver	m^2	---	29.05	0.050	0.082
3.25.1	80 mm th. M-20 CC 20 mm CA by paver	m^2	---	28.75	0.036	0.065
3.25.2	100 mm th. M-20 CC 20 mm CA by paver	m^2	---	35.40	0.044	0.080
3.27.1	M-15 CC (20 mm CA) for side lining	m^3	---	277.70	0.480	0.785
3.27.2	M-20 CC (20 mm CA) for side lining	m^3	---	338.30	0.417	0.765
3.28	M-15 CC (40 mm CA) for bed lining	m^3	---	240.00	0.420	0.870
3.29	M-20 CC (40 mm CA) for bed lining	m^3	---	300.00	0.380	0.850
3.36	Filter around relief pipe	each	---	---	0.034	0.016
3.37	Fixing Shahbad slab for lining in CM 1:3	m^2	0.030	1.00	0.002	---
3.38	Fixing PCC slab for lining in CM 1:3	m^2	0.050	2.33	0.005	---
3.39	Fixing PCC lug slab in CM 1:3	m	0.017	0.60	0.001	---
	Notes:Providing 75 mm sand backing	m^2	---	---	0.077	---
3.44	M-15 PCC slab 550 x 550 x 55 mm	each	---	5.54	0.009	0.013
3.45	M-15 PCC slab 550 x 300 x 55 mm	each	---	2.96	0.004	0.007
3.46	M-15 PCC slab 450 x 300 x 30 mm	each	---	1.95	0.002	0.003
3.47	M-15 PCC slab 450 x 150 x 30 mm	each	---	1.03	0.001	0.001
3.48	M-15 PCC slab 400 x 400 x 30 mm	each	---	2.24	0.002	0.003
3.49	M-15 PCC slab 400 x 150 x 30 mm	each	---	0.96	0.001	0.001
			Murum m^3	Cement kg	Sand m^3	Stones m^3
3.50	UCR in CM 1:5 (quarry stone)	m^3	---	115.20	0.410	1.17
3.51	UCR in CM 1:5 (excavated stone)	m^3	---	115.20	0.410	1.17
3.52	250 mm thick UCR stone pitching	m^2	---	---	---	0.29
Note:	If 150 mm thick murum bed provided		0.18	---	---	---
3.53	300 mm thick UCR stone pitching	m^2	---	---	---	0.35
Note:	If 150 mm thick murum bed provided		0.18	---	---	---
3.54	450 mm thick UCR stone pitching	m^2	---	---	---	0.50
Note:	If 150 mm thick murum bed provided		0.18	---	---	---
3.55	300 mm thick UCR pitching in CM 1:5	m^2	---	30.23	0.107	0.35
Note:	If 150 mm thick murum bed provided		0.18	---	---	---
3.56	300 mm thick Khandki stone pitching	m^2	---	---	---	0.35
Note:	If 150 mm thick murum bed provided		0.18	---	---	---
3.57	450 mm thick Khandki stone pitching	m^2	---	---	---	0.50
Note:	If 150 mm thick murum bed provided		0.18	---	---	---

QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Murum m^3	Cement kg	Sand m^3	Stones m^3
3.58	300 mm thick Khandki pitching in CM1:5	m^2	---	29.16	0.099	0.35
Note:	If 150 mm thick murum bed provided		0.18	---	---	---
3.59	450 mm thick Khandki pitching in CM1:5	m^2	---	40.70	0.142	0.50
Note:	If 150 mm thick murum bed provided		0.18	---	---	---

Notes:

`1. The basic rates worked out for concrete Item No.3.28 and 3.29 in this chapter are exclusive of form works, centering and scaffolding charges. Hence additionalities for form work, centering and scaffolding pertaining to cement concrete Item No.3.28 and 3.29 only shall be added to the finished item rates as per the Appendix -I of volume -I of Uniform Common SR.

WRD: 3. CANAL AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.1.	Excavation in **hard rock of all toughness** including boulders above 0.6 m diameter (0.113 cum) **for canals,** cut-off trench of embankments, filter / catch water drains and other appurtenent structures **by approved controlled blasting methods** including control of vibrations by use of delay detonators and control of fly-rocks by muffling arrangements and adopting only jack hammers for drilling holes and minimising damage to side slopes of canal in water prism area by adopting any one or combination of line drilling / pre-splitting / smooth blasting techniques including cost of all materials, machinery, labour, placing excavated rock neatly in approved dump area as directed etc.,complete with all lead and lift **depth of cut upto 18 m.**	**m^3**	**787.00**
Note:	For depth of cut exceeding 8 m from ground level increase the basic rate by 5 percent for the quantity of excavation beyond 18 m depth.		
	EMBANKMENT WORKS USING BORROW AREA SOIL :		
WRD: 3.2.	Providing **hearting** embankment **using selected impervious approved soil from borrow areas** in layers of 250 to 300 mm (before compaction) including cost of all materials,machinery, labour,all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to **density control of not less than 95 percent or as stipulated using power roller etc., complete with all lead and all lifts.**	**m^3**	**464.00**
WRD: 3.3.	Providing **casing embankment using semi-pervious / pervious approved soil from borrow areas** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller etc., complete with **all lead and all lifts.**	**m^3**	**489.00**
WRD: 3.4.	Providing **hearting / casing embankment using homogeneous approved soil from borrow areas** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller etc., complete with **all lead and all lifts.**	**m^3**	**474.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	EMBANKMENT WORKS USING DUMP AREA SOIL :		
WRD: 3.5.	Providing **hearting** embankment **using selected impervious soil from dump** areas in layers of 250 to 300 mm (before compaction) including cost of all materials,machinery, labour,all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to **density control of not less than 95 percent or as stipulated using power roller etc., complete with all lead and all lifts.**	**m^3**	**206.00**
WRD: 3.6.	Providing **casing embankment using semi-pervious / pervious soil from dump areas** in layers of 250 to 300 mm (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller etc., complete with **all lead and all lifts.**	**m^3**	**209.00**
	EMBANKMENT WORKS USING EXCAVATED SOIL :		
WRD: 3.7.	Providing **hearting** embankment using **impervious soil collected in embankment area** in heaps as part of disposal of excavated soil from canal in layers of 250 to 300 mm thickness (before compaction),including cost of all materials, machinery, labour, all other operations such as spreading soil in layer of specified thickness, sorting-out, breaking clods, levelling, sectioning edges / sides, watering compacting each layer to **density control of not less than 95 percent** or as stipulated using **power roller etc., complete with all lead for water.**	**m^3**	**126.00**
WRD: 3.8.	Providing **casing embankment** using **semi-pervious / pervious soil collected in embankment area** in heaps as part of disposal of excavated soil from canal in layer of 250 to 300 mm (before compaction) including cost of all materials,machinery, labour,all other operations such as spreading soil in layer of specified thickness, sorting-out, breaking clods, levelling, sectioning edges / sides, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated by power roller etc., complete with all lead for water.	**m^3**	**126.00**
WRD: 3.9.	Providing **compacted embankment for field irrigation channels with gravely soil** from **approved borrow area** in layers of 100 to 150 mm thickness (before compaction) including cost of all materials, machinery, labour, all other operations such as collection of soil, spreading in layer		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	of specified thickness, sorting-out, breaking clods, levelling, watering, compacting as directed , dressing sides to required slope etc., complete **with all lead and all lifts.**	**m^3**	**393.00**
	FOUNDATION FILLING WORKS :		
WRD: 3.10.	Providing **rubble and sand filling** in layers of 250 to 300 mm including cost of all materials,machinery, labour, watering, ramming etc.,complete with all lead and all lifts.	**m^3**	**2003.00**
WRD: 3.11.	Providing **rubble and murum filling** in layers of 250 to 300 mm including cost of all materials, machinery, labour, watering,ramming etc.,complete with all lead and all lifts.	**m^3**	**1398.00**
WRD: 3.12.	Providing and **laying 250 mm thick sand blanket** below embankment including cost of all materials, machinery, labour, spreading to specified thickness etc., complete with all lead and all lifts.	**m^2**	**470.00**
WRD: 3.13.	Providing and constructing **dry rubble rock-toe** using rubble and stone chips from approved source including cost of all materials, machinery, labour, hand packing rubble and stone chips, finishing top and sides to required slopes etc., complete with all lead and all lifts.	**m^3**	**1331.00**
WRD: 3.14.	Providing and constructing **longitudinal and cross graded filter drains** using sand and 20 mm down approved clean, hard, graded aggregates satisfying specified filter creteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings **with all lead and all lifts.**	**m^3**	**1933.00**
WRD: 3.15.	Providing and constructing 500 mm thick **vertical or inclined graded filter media** consisting of 150 mm thick sand layers and 200 mm thick 20 mm down coarse aggregate layer using approved materials satisfying specified filter creteria including cost of all materials, machinery, labour, laying to specified slope, compaction etc.,complete as per specifications and approved drawingsa with all lead and all lifts.	**m^3**	**1925.00**
WRD: 3.16.	Providing and constructing **graded filter media below and behind rock-toe** consisting of 200 mm thick sand, 150 mm thick 20 mm down and 150 mm thick 40 mm down clean, hard, graded coarse aggregate layers satisfying specified filter creteria behind rock-toe and 150 mm thick sand, 200 mm thick 20 mm down and 650 mm thick 40 mm down clean, hard, graded coarse aggregates layers satisfying speccified filter creiteria below rock-toe including cost of all materials, machinery, labour, laying to specified thickness and slope, compaction etc.,complete as per **specifications and approved drawings with all lead and all lifts.**	**m^3**	**1831.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.17.	Providing and laying **filter media for embankment** consisting of 2 layers of poly-propeline non-woven **filter fabric** and **200 mm thick** 20 mm and down approved clean, hard, graded coarse **aggregate layer** between filter fabric layers for embankment including cost of all materials, machinery, labour, forming toe-drain etc., complete with **all leads and lifts.**		
3.17.1	**using 200 gsm filter fabric.**	m^2	**883.00**
3.17.2	**using 250 gsm filter fabric.**	m^2	**959.00**
	ROCK FILL WORKS :		
WRD: 3.18.	Providing and constructing **rockfill casing** to canal embankment **using** graded **stones and spalls source** including cost of all materials, machinery, labour, spreading stones and spalls in layers, hand packing, wedging, finishing surface to required slopes etc., complete with all lead and all lifts.	m^3	**1240.00**
WRD: 3.19.	Providing and constructing **rockfill casing** to canal embankment **using** graded **stones and spalls available in dump yard** including cost of all materials, machinery,labour, spreading stones and spalls in layers, hand packing, wedging, finishing surface to required slopes etc., complete with all lead and all lifts.	m^3	**626.00**
Note:	Stones and spalls available in dump yard will be issued at specified issue rate in dump yard.		
	CANAL LINING WORKS :		
WRD: 3.20.	Providing **cohesive non-swelling (CNS) soil** lining to canals **using soil from borrow area** including cost of all materials, labour, machinery, spreading soil in layers ofthickness not more than 150 mm, breaking clods, levelling, watering, compacting to **density control of not less than 95 percent** or as stipulated, dressing to required profile **etc., complete with all lead and lifts.**	m^3	**568.00**
WRD: 3.21.	Providing **cohesive non-swelling (CNS) soil** lining to canals **using soil collected in heaps** along the edge of canal requiring CNS soil lining as part of the disposal of excavated soil from canal excavation in CNS soil reach including including cost of all machinery, labour, spreading in layers of thickness not more than 150 mm, breaking clods, levelling, watering, compacting to **density control of not less than 95 percent** or as stipulated, dressing to required profile etc., complete with **lead and all lifts.**	m^3	**211.00**
WRD: 3.22.	Providing and **fixing** 200 x 200 x 750 mm size top surface neatly **dressed canal bed level stone** including cost of all materials, labour, excavation, fixing in position to correct level etc., complete with **lead and all lifts.**	**each**	**137.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.23.	Providing, **fabricating and placing** in position **reinforcement steel** for RCC works including cost of all materials, machinery,labour, cleaning, straightening, cutting,bending,hooking lapping,welding wherever required, tying with 1.25 mm dia. soft annealed steel wire etc., complete with **lead and all lifts.**	**kg**	**86.00**
WRD: 3.24.1.	Providing and laying **80 mm thick in-situ M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete using 20 mm down** approved, clean, hard, graded aggregates **for canal lining deploying batching plant, transit mixers and** vibratory cylinder type **mechanical paver** including cost of all materials, machinery, labour, cleaning, batching, mixing, placing in position,forming contraction joints, fixing PVC joint sealing strips, finishing, curing,shifting of paver from one side to other side of canal etc., complete **with all lead and lift.**	**m^2**	**708.00**
WRD: 3.24.2.	Providing and laying **100 mm thick in-situ M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete using 20 mm down** approved, clean, hard, graded aggregates **for canal lining deploying batching plant, transit mixers and** vibratory cylinder type **mechanical paver** including cost of all materials, machinery, labour, cleaning, batching, mixing, placing in position,forming contraction joints, fixing PVC joint sealing strips, finishing, curing,shifting of paver from one side to other side of canal etc., complete **with all lead . and lift**	**m^2**	**851.00**
WRD: 3.25.1.	Providing and laying **80 mm thick in-situ M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete using 20 mm down** approved, clean, hard, graded aggregates **for canal lining deploying batching plant, transit mixers and** vibratory cylinder type **mechanical paver** including cost of all materials, machinery, labour, cleaning, batching, mixing, placing in position,forming contraction joints, fixing PVC joint sealing strips, finishing, curing,shifting of paver from one side to other side of canal etc., complete **with all lead and lift**	**m^2**	**749.00**
WRD: 3.25.2.	Providing and laying **100 mm thick in-situ M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete using 20 mm down** approved, clean, hard, graded aggregates **for canal lining deploying batching plant, transit mixers and** vibratory cylinder type **mechanical paver** including cost of all materials,		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	machinery, labour, cleaning, batching, mixing, placing in position,forming contraction joints, fixing PVC joint sealing strips, finishing, curing,shifting of paver from one side to other side of canal etc., complete **with all lead lifts.**	m^2	**895.00**
WRD: 3.26.	**Dismantling, shifting and re-erecting mechanical concrete paver and DG set** with all accessories across canal CD work or such other locations where dismantling, shifting, re-erecting and aligning of paver is necessary for continuing further canal lining work including cost of all materials, machinery, labour etc., complete **with all leads and lifts.**	**each shifting**	**10484.00**
Note:	The rate under this item shall not be considered for local shifting of paver from one side to other side of canal. The cost of local shifting of paver is included in concrete lining rates under items 29.a, 29.b, 30.a and 30.b.		
WRD: 3.27.1.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) grade **cement concrete** using **20 mm** down approved, clean, hard, graded aggregates **for side lining of canal** including cost of all materials, machinery, labour, cleaning, batching, mixing, formwork, supports, placing in position, levelling, vibrating, finishing junction of bed and sides to required curvature,finishing side slopes, curing etc., complete **with all leads and lifts**	m^3	**7978.00**
WRD: 3.27.2	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) grade **cement concrete** using **20 mm** down approved, clean, hard, graded aggregates **for side lining of canal** including cost of all materials, machinery, labour, cleaning, batching, mixing, formwork, supports, placing in position, levelling, vibrating,finishing junction of bed and sides to required curvature,finishing side slopes, curing etc., complete with **all leads and lifts**	m^3	**8591.00**
WRD: 3.28.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) grade **cement concrete** using **40 mm** down approved, clean, hard, graded aggregates **for bed lining of canal** including cost of all materials, machinery labour, cleaning, batching,mixing, formwork, placing in position,levelling, vibrating,finishing, curing etc., complete with initial **all leads and lifts**	m^3	**5831.00**
	(Additionalites for form work shall be added to the basic rate as per notes in this chapter)		
WRD: 3.29.	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) grade **cement concrete** using **40 mm** down approved, clean, hard, graded aggregates **for bed lining of canal** including cost of all materials, machinery labour, cleaning, batching,mixing, formwork, placing in position,levelling, vibrating,finishing, curing etc., complete with **all leads and lifts.**	m^3	**5970.00**
	(Additionalites for form work shall be added to the basic rate as per notes in this chapter)		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.30.	Providing and **fixing 50 mm diameter and 125 mm long perforated GI pressure relief pipe** with one end closed by perforated GI plate and other end provided with alluminium lid hinged to pipe including cost of all materials, labour, drilling 8 mm dia holes etc., complete with **all leads and lifts.**	**each**	**168.00**
WRD: 3.31.	Providing and **fixing 50 mm diameter and 225 mm long perforated GI pressure relief pipe** with one end closed by perforated GI plate and other end provided with alluminium lid hinged to pipe including cost of all materials, labour, drilling 8 mm dia holes etc., complete with **all leads and lifts.**	**each**	**214.00**
WRD: 3.32.	Providing and **fixing 50 mm diameter and 300 mm long perforated GI pressure relief pipe** with one end closed by perforated GI plate and other end provided with alluminium lid hinged to pipe including cost of all materials, labour, drilling 8 mm dia holes etc., complete with **all leads and lifts.**	**each**	**258.00**
WRD: 3.33.	Providing and **fixing 50 mm diameter and 450 mm long perforated GI pressure relief pipe** with one end closed by perforated GI plate and other end provided with alluminium lid hinged to pipe including cost of all materials, labour, drilling 8 mm dia holes etc., complete with **all leads and lifts.**	**each**	**328.00**
WRD: 3.34.	Providing and **fixing 50 mm diameter and 750 mm long perforated GI pressure relief pipe** with one end closed by perforated GI plate and other end provided with alluminium lid hinged to pipe including cost of all materials, labour, drilling 8 mm dia holes etc., complete with **all leads and lifts.**	**each**	**462.00**
WRD: 3.35.	**Drilling 1.00 m deep 32 mm dia pressure relief hole** below pressure relief pipe for bed / side lining of canal laid on rock including cost of all materials, machinery, labour etc., complete with **all leads and lifts.**	**each**	**300.00**
WRD: 3.36.	Providing and **forming 350x 350 x 400 mm deep filter drain** consisting of 75 mm thick 10 mm down coarse aggregate layer **around pressure relief pipe** and 75 mm thick sand layer around coarse aggregate layer including cost of all materials, labour, excavation of pit etc., complete with all lead and all lifts.	**each**	**96.00**
WRD: 3.37.	F**ixing** 25 to 40 mm thick **Shahabad / Talikota / other similar stone slabs** with pointing **in CM 1:3 proportion** by volume **for canal / field channel lining** including cost of all materials (excluding stone slabs), labour, preparing surface, cutting slabs to required size, batching and mixing mortar, packing mortar into joints and flush finishing joints neatly, curing etc., complete with all lead and all lifts.	**m^2**	**125.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.38.	**Fixing PCC slabs of various sizes in CM 1 : 3 proportion** by volume **to side slopes of canal** including cost of all materials (excluding PCC slabs), labour, preparing surface, batching and mixing mortar, packing mortar into joints and flush finishing joints neatly, curing etc., complete with **all leads and lifts.**	**m^2**	**114.00**
WRD: 3.39.	**Fixing PCC lug slabs of various sizes in CM 1 : 3** proportion by volume for supporting PCC slab lining including cost of all materials (excluding PCC lug slabs), labour, necessary excavation, refilling, batching and mixing mortar, packing mortar into joints and flush finishing joints, curing etc., complete with **all leads and lifts.**	**m**	**64.00**
WRD: 3.40.	Fixing 300 mm height **pre-cast drop for field channel** as directed including excavation and refilling to the extent necessary etc., complete with **all leads and lifts.**	**each**	**243.00**
WRD: 3.41.	Providing and fixing **LDPE sheet** for bed and sides of canal including cost of all materials, labour,laying and joining as per specifications etc., complete with **all leads and lifts.**		
3.41.1	**Using 500 micron thick LDPE sheet.**	**m^2**	**180.00**
3.41.2	**Using 750 micron thick LDPE sheet.**	**m^2**	**268.00**
3.41.3	**Using 1000 micron thick LDPE sheet.**	**m^2**	**348.00**
Note:	1. If the surface on which the LDPE sheet is to be laid is too rough and undulating provide average 75 mm thick unscreened sand backing to LDPE sheet.		
	2. For providing 75 mm thick unscreened sand backing add	**m^2**	**147.00**
WRD: 3.42.	Providing and **fixing** 20 mm thick **100 mm depth tarfelt expansion joint filler board** for cement concrete lining of canal including cost of all materials, labour etc., complete with **all leads and lifts.**	**m**	**80.00**
WRD: 3.43.	Providing and **fixing** 20 mm thick **150 mm depth tarfelt expansion joint filler board** for cement concrete lining of canal including cost of all materials, labour etc., complete with **all leads and lifts.**	**m**	**114.00**
WRD: 3.44.	**Manufacturing 550 x 550 x 55 mm size PCC lining slabs in M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **20 mm down** approved, clean, hard, **graded aggregates** including cost of all materials, machinery, labour, formwork, batching, mixing, laying, compacting, finishing, curing etc., complete with **all leads and lifts**	**each**	**131.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.45.	**Manufacturing 550 x 300 x 55 mm size PCC lug slabs in M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **20 mm down** approved, clean, hard, **graded aggregates** including cost of all materials, machinery, labour, formwork, batching, mixing, laying, compacting, finishing, curing etc., complete with **all leads and lifts.**	**each**	**90.00**
WRD: 3.46.	**Manufacturing 450 x 300 x 30 mm size PCC lining slabs in M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **10 mm down** approved, clean, hard, **graded aggregates** including cost of all materials, machinery, labour, formwork, batching, mixing, laying, compacting, finishing, curing etc., complete with **all leads and lifts.**	**each**	**51.00**
WRD: 3.47	**Manufacturing 450 x 150 x 30 mm size PCC lug slabs in M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **10 mm down** approved, clean, hard, **graded aggregates** including cost of all materials, machinery, labour, formwork, batching, mixing, laying, compacting, finishing, curing etc., complete with **all leads and lifts.**	**each**	**38.00**
WRD: 3.48.	**Manufacturing 400 x 400 x 30 mm size PCC lining slabs in M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **10 mm down** approved, clean, hard, **graded aggregates** including cost of all materials, machinery, labour, formwork, batching, mixing, laying, compacting, finishing, curing etc., complete with **all leads and lifts.**	**each**	**56.00**
WRD: 3.49.	**Manufacturing 400 x 150 x 30 mm size PCC lug slabs in M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **10 mm down** approved, clean, hard, **graded aggregates** including cost of all materials, machinery, labour, formwork, batching, mixing, laying, compacting, finishing, curing etc., complete with **all leads and lifts.**	**each**	**37.00**
	MASONRY AND PITCHING WORKS :		
WRD: 3.50.	Providing and constructing **uncoursed rubble stone masonry in CM 1:5** proportion by volume **for canal side lining** using stones and stone chips from **approved quarry** including cost of all materials, machinery, labour, batching and mixing mortar, packing mortar into joints, wedging stone chips, forming weep holes at specified interval, finishing, curing etc., complete with **all lead and lifts.**	**m^3**	**3769.00**
WRD: 3.51.	Providing and constructing **uncoursed rubble stone masonry in CM 1:5** proportion by volume **for canal side lining** using stones and stone chips		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	from **canal excavation** including cost of all materials,machinery, labour, batching and mixing mortar, packing mortar into joints, wedging stone chips, forming weep holes at specified interval, finishing, curing etc., complete with **all lead and lifts.**	**m^3**	**3250.00**
Note:	Stones / stone chips will be issued in dump area at specified issue rate.		
WRD: 3.52.	Providing and constructing **250mm thick dry rubble stone pitching** with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips, finishing etc., complete with **all lead and lifts.**	**m^2**	**370.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
WRD: 3.53.	Providing and constructing **300mm thick dry rubble stone pitching** with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips, finishing etc., complete with **all lead and lifts.**	**m^2**	**418.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
WRD: 3.54.	Providing and constructing **450 mm thick size stone pitching** using 200 to 250 mm size stones with pin headers at 2 per sqm set **in CM 1 : 5** proportion by volume with **pointing joints in CM 1 : 3** proportion by volume including cost of all materials from approved source, labour, packing stone chips and mortar into joints,finishing,curing etc.,complete **with all lead and lifts.**	**m^2**	**604.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
WRD: 3.55.	Providing and constructing **300 mm thick rubble stone pitching** set **in CM 1: 5** proportion by volume with pin headers at 2 per sqm in including cost of all materials from approved source, labour, packing stone chips and mortar into joints, finishing, curing etc., complete with **all lead and lifts.**	**m^2**	**931.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
WRD: 3.56.	Providing and constructing **300 mm thick dry size stone pitching** using 200 to 250 mm size stones with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips into joints, finishing etc., complete with **all lead and lifts.**	**m^2**	**339.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
WRD: 3.57.	Providing and constructing **450 mm thick dry size stone pitching** using 200 to 250 mm size stones with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips into joints, finishing etc., complete with **all lead and lifts.**	**m^2**	**405.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 3.58.	Providing and constructing **300 mm thick size stone pitching** using 200 to 250 mm size stones with pin headers at 2 per sqm set **in CM 1 : 5** proportion by volume with **pointing joints in CM 1 : 3** proportion by volume including cost of all materials from approved source, labour, packing stone chips and mortar into joints,finishing,curing etc.,complete with **all lead and lifts.**	**m^2**	**813.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
WRD: 3.59.	Providing and constructing **450 mm thick size stone pitching** using 200 to 250 mm size stones with pin headers at 2 per sqm set **in CM 1 : 5** proportion by volume with **pointing joints in CM 1 : 3** proportion by volume including cost of all materials from approved source, labour, packing stone chips and mortar into joints,finishing,curing etc.,complete with **all lead and lifts.**	**m^2**	**1061.00**
Note:	If 150 mm thick **murum bed** is to be provided below pitching add	**m^2**	**69.00**
	CADA WORKS		
WRD 3.60	Providing & installing at site of work **80mm dia**. Perforated corrugated PVC pipes conforming to IS 9271 with prewrapped 250gsm. Geosynthetic filter material by laser guided trencher machine/by mechanical means including cost of pipe, filter material, pipe accessories and all taxes including all lead and lifts., complete and labour charges only for installation of site at work perforated corrugated PVC pipes including lowering into trenches, laying true to lines, level land and perfect leak proof linking at joints, fittings pipes accessories with all lead and lifts charges including the refilling the trench 50 cm around the pipe with gravel or selected earth available from the excavation etc., **complete with all leads and lifts.**	**m**	**291.00**
WRD 3.61.	Providing & installing at site of work **100mm dia**. Perforated corrugated PVC pipes conforming to IS 9271 with prewrapped 250gsm. Geosynthetic filter material by laser guided trencher machine/by mechanical means including cost of pipe, filter material, pipe accessories and all taxes including all lead and lifts., complete and labour charges only for installation of site at work perforated corrugated PVC pipes including lowering into trenches, laying true to lines, level land and perfect leak proof linking at joints, fittings pipes accessories with all lead and lifts charges including the refilling the trench 50 cm around the pipe with gravel or selected earth available from the excavation etc., **complete with all leads and lifts.**	**m**	**351.00**

WATER RESOURCES DEPARTMENT

CHAPTER - WRD:4

CANAL CROSS DRAINAGE WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

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WRD: 4. CANAL CROSS DRAINAGE WORKS
QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Steel kg	Cement kg	Sand / FA m^3	CA m^3
4.2.	25 mm dia. anchor rod	Each	9.740	0.51	---	---
4.3.	Providing & fixing reinforcement steel	kg	1.025	---	---	---
4.4.	Foundation well cutting edge	t	1025.000	---	---	---
4.5	M-15 (40 mm CA) for foundation filling	m^3	---	240.00	0.420	0.870
4.6	M-15 (80 mm CA) for foundation filling	m^3	---	210.00	0.380	0.980
4.7	M-10 (80 mm CA) for foundation filling	m^3	---	190.00	0.380	0.980
4.8	M-20 (40 mm CA) for foundation filling	m^3	---	270.00	0.420	0.860
4.9	M-20 (40 mm CA) for sub-structure	m^3	---	300.00	0.380	0.850
4.10	M-10 (20 mm CA) for sub-structure	m^3	---	250.00	0.470	0.770
4.11	M-20 (40 mm CA) for well steining	m^3	---	300.00	0.380	0.850
4.12	M-15 (40 mm CA) for well top plug	m^3	---	240.00	0.420	0.870
4.13.1	M-15 (80 mm CA) for piers	m^3	---	210.00	0.380	0.980
4.13.2	M-15 (80 mm CA) for abutments	m^3	---	210.00	0.380	0.980
4.14.1	M-20 (40 mm CA) for piers	m^3	---	300.00	0.380	0.860
4.14.2	M-20 (40 mm CA) for abutments	m^3	---	300.00	0.380	0.860
4.15.1	M-10 (40 mm CA) for piers	m^3	---	220.00	0.470	0.890
4.15.2	M-10 (40 mm CA) for abutments	m^3	---	220.00	0.470	0.890
4.16	M-20 (40 mm CA) for cantilever walls	m^3	---	300.00	0.380	0.860
4.17.1	M-15 (40 mm CA) for piers	m^3	---	240.00	0.420	0.860
4.17.2	M-15 (40 mm CA) for abutment	m^3	---	240.00	0.420	0.860
4.17.3	M-15 (40 mm CA & plums) for piers	m^3	---	200.00	0.370	0.960
4.17.4	M-15 (40 mm CA & plums) for abutment	m^3	---	200.00	0.370	0.960
4.18	M-15 (40 mm CA) for cast in-situ pipes	m^3	---	247.40	0.430	0.880
4.19	M-15 (80 mm CA) for cast in-situ pipes	m^3	---	217.10	0.380	0.980

QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:.			Stone m^3	Cement kg	Sand / FA m^3	CA m^3
4.20.1	M-20 20 mm CA) for ground level trough	m^3	---	338.40	0.420	0.760
4.20.2	M-20 (20 mm CA) for aqueduct trough	m^3	---	338.40	0.420	0.760
4.20.3	M-25 (20 mm CA) for aqueduct trough	m^3	---	368.60	0.438	0.765
4.20.4	M-30 (20 mm CA) for aqueduct trough	m^3	---	398.90	0.438	0.785
4.21.1	M-20 (20 mm CA) for piers by pumping	m^3	---	378.70	0.448	0.673
4.21.2	M-20 (20 mm) for abutments by pumping	m^3	---	378.70	0.448	0.673
4.21.3	M-20 (20 mm) for columns / bracings of aqueduct substructure by pumping	m^3	---	378.70	0.448	0.673
4.22	M-20 (20 mm CA) for aqueduct trough by pumping concrete	m^3	---	378.70	0.448	0.673
4.23	UCR masonry in CM 1:4 for sub-structure	m^3	1.020	144.50	0.410	---
4.24	UCR masonry in CM 1:4 super structure	m^3	1.020	144.50	0.410	---
4.25	CR 2nd sort masonry in CM 1:4 propn	m^3	1.020	134.40	0.355	---
4.26	CR 1st sort masonry in CM 1:4 propn	m^3	1.020	134.40	0.355	---
4.27	Pointing masonry in CM 1:2 propn	m^2	---	3.88	0.006	---
			BS Slab m^3	Cement kg	Sand / FA m^3	CA m^3
4.28.1	Roughly dressed BS slab coping in CM	m^2	0.105	7.50	0.002	---
4.28.2	One line dressed BS slab coping in CM	m^2	0.105	7.50	0.002	---
4.28.3	Two line dressed BS slab coping in CM	m^2	0.105	7.50	0.002	---
			Steel kg	Cement kg	Sand / FA cum	CA cum
4.29	Railing	m	1.56	3.50	0.003	0.006
4.30.1	Jointing hume pipe 300 mm dia	Joint	---	10.10	0.010	---
4.30.2	Jointing hume pipe 450 mm dia	Joint	---	17.50	0.022	---
4.30.3	Jointing hume pipe 600 mm dia	Joint	---	24.80	0.026	---
4.30.4	Jointing hume pipe 700 mm dia	Joint	---	32.50	0.032	---
4.30.5	Jointing hume pipe 800 mm dia	Joint	---	40.00	0.040	---
4.30.6	Jointing hume pipe 900 mm dia	Joint	---	45.00	0.046	---
4.30.7	Jointing hume pipe 1000 mm dia	Joint	---	50.00	0.051	---
4.30.8	Jointing hume pipe 1100 mm dia	Joint	---	57.60	0.061	---
4.30.9	Jointing hume pipe 1200 mm dia	Joint	---	67.70	0.071	---

QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
			Stone m^3	Soil m^3	Sand / FA m^3	CA m^3
4.31	Rubble and sand filling for foundation	m^3	1.020	---	0.408	
4.32	CNS soil filling around pipes	m^3	---	1.20	---	---
4.33	CNS soil filling above pipes	m^3	---	1.20	---	---

Notes:

1 The basic rates worked out for item No.s 4.20.1, 4.20.2, 4.20.3, 4.20.4, & 4.22 in this chapter are inclusive of form work, centering and scaffolding charges. Other concrete items in this chapter are exclusive of form work, centering and scaffolding charges. Hence the additionalities for form work, centering and scaffolding pertaining to cement concrete items except for item No.s 4.20.1, 4.20.2, 4.20.3, 4.20.4, & 4.22 shall be added to the finished item rates as per the Appendix -I of volume -I of Uniform Common SR.

WRD: 4. CANAL CROSS DRAINAGE WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 4.1	Excavation in **hard rock of all toughness** including boulders above 0.6 m dia. (0.113 cum) **by** approved **controlled blasting methods for foundations of canal cross drainage** and other appurtenant structures adopting only jack hammers for drilling holes and using delay detonators for control of vibrations and by making muffling arrangements for control of fly-rock and by adopting any one or combination of line drilling / pre-splitting / smooth blasting techniques to minimise damage to rock beyond excavation line and placing the excavated hard rock neatly in approved dump area as directed including cost of all materials,machinery, **labour etc., complete with all lead and lifts.**	**m^3**	**877.00**
WRD: 4.2.	Providing and **fixing** 25 mm dia 2.50 m long cold twisted deformed steel **anchor rod** with 1.25 m length driven into 38 mm dia hole drilled in bed rock and remaining length embedded in concrete / masonry including cost of all materials, machinery, labour, drilling and cleaning hole,filling hole with thick cement slurry, driving anchor rod etc.,complete **with all lead and lifts.**	**each**	**1170.00**
	STEEL AND CEMENT CONCRETE WORKS : (Shall be read along with the note contained in this chapter regarding additionalites for form work in P.No: 51)		
WRD: 4.3.	Providing, fabricating and placing in position **reinforcement steel** bars **for RCC works** including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, lapping, welding wherever required, tying with 1.25 mm dia soft annealed steel wire, etc., complete with all **lead and lifts.**	**kg**	**86.00**
WRD: 4.4.	Providing, fabricating and fixing in position **structural steel cutting edge** consisting of 100 x 100 x 10 mm angle and 250 x 12 mm plate **for sinking foundation wells** including cost of all materials, machinery, labour, cleaning, cutting, bending, welding, providing anchors etc., **complete with all lead and lifts.**	**kg**	**104.00**
WRD: 4.5.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for foundation filling** including cost of all materials, machinery, labour, formwork, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts .**	**m^3**	**5515.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 4.6.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) grade **cement concrete** using **80 mm** down approved, clean, hard, graded **aggregates for foundation filling** including cost of all materials, machinery, labour, formwork, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts .**	**m^3**	**5317.00**
WRD: 4.7.	Providing and laying insitu vibrated **M-10** (28 days cube compressive strength not less than 10 N / sq mm) **grade cement concrete** using **80 mm** down approved, clean, hard, graded **aggregates for foundation filling** including cost of all materials, machinery, labour, formwork, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts .**	**m^3**	**5145.00**
WRD: 4.8.	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for foundation** cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts .**	**m^3**	**6015.00**
WRD: 4.9.	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for sub-structure** works including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5970.00**
WRD: 4.10.	Providing and laying insitu vibrated **M-10** (28 days cube compressive strength not less than 10 N /sq mm) **grade cement concrete** using **20 mm** down approved, clean, hard, graded **aggregates for sub-structure** works including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**6036.00**
WRD: 4.11.	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for well steining** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5970.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 4.12.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for well top plug** including cost of all materials, machinery,labour,cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete **with all lead and all lifts.**	**m^3**	**5831.00**
WRD: 4.13.1	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **80 mm** down approved, clean, hard, graded **aggregates for piers** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5835.00**
WRD: 4.13.2	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) grade **cement concrete** using **80 mm** down size approved, clean, hard, graded **aggregates for abutments** including cost of all materials, labour, machinery, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts .**	**m^3**	**5835.00**
WRD: 4.14.1	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for piers** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**6032.00**
WRD: 4.14.2	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for abutments** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**6032.00**
WRD: 4.15.1	Providing and laying insitu vibrated **M-10** (28 days cube compressive strength not less than 10 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for piers** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5953.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 4.15.2	Providing and laying insitu vibrated **M-10** (28 days cube compressive strength not less than 10 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for abutments** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all lead and lifts.**	**m^3**	**5953.00**
WRD: 4.16	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for cantiliver / counterfort retaining walls** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete **with all leads and lifts.**	**m^3**	**5831.00**
WRD: 4.17.1.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for piers** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5893.00**
WRD: 4.17.2.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for gravity type retaining walls / abutments** etc., including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5893.00**
WRD: 4.17.3.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates** with placing and **sinking plums** of size 150 to 80 mm **upto 15 percent for piers** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts .**	**m^3**	**5556.00**
WRD: 4.17.4.	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates** with placing and **sinking plums** of size 150 to 80 mm **upto 15 percent for gravity**		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	type retaining walls / abutments etc., including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5556.00**
WRD: 4.18	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **40 mm** down approved, clean, hard, graded **aggregates for cast in-situ pipes** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**6014.00**
WRD: 4.19	Providing and laying insitu vibrated **M-15** (28 days cube compressive strength not less than 15 N / sq mm) **grade cement concrete** using **80 mm** down approved, clean, hard, graded **aggregates for cast in-situ pipes** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts.**	**m^3**	**5805.00**
WRD: 4.20.1	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **20 mm** down approved, clean, hard, graded **aggregates for RCC troughs resting on ground** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all leads and lifts** . (Refer Note in this chapter)	**m^3**	**9409.00**
WRD: 4.20.2	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **20 mm** down approved, clean, hard, graded **aggregates for RCC troughs for aqueduct** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with all **lead and lifts upto 1.5 m.** (Refer Note in this chapter)	**m^3**	**11165.00**
Note:	1. For every 1.5 m additional lift beyond 1.5 m from surface add	**m^3**	**79.00**
	2. For every 1.5 m increase in height of scaffolding beyond 4.5 m from surface add	**m^3**	**444.00**
WRD: 4.20.3	Providing and laying insitu vibrated **M-25**(28 days cube compressive strength not less than 25 N / sq mm) **grade cement concrete** using **20 mm** down approved, clean, hard, graded **aggregates for RCC troughs for aqueduct** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with all **lead and lifts upto 1.5 m .** (Refer Note in this chapter)	**m^3**	**11477.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
Note:	1. For every 1.5 m additional lift beyond 1.5 m from surface add	m^3	**79.00**
	2. For every 1.5 m increase in height of scaffolding beyond 4.5 m from surface add	m^3	**444.00**
WRD: 4.20.4	Providing and laying insitu vibrated **M-30** (28 days cube compressive strength not less than 30 N / sq mm) **grade cement concrete** using **20 mm** down approved, clean, hard, graded **aggregates for RCC troughs for aqueduct** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with all **lead and lifts upto 1.5 m.** (Refer Note in this chapter)	m^3	**11791.00**
Note:	1. For every 1.5 m additional lift beyond 1.5 m from surface add	m^3	**79.00**
	2. For every 1.5 m increase in height of scaffolding beyond 4.5 m from surface add	m^3	**444.00**
WRD: 4.21.1	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **20 mm down** approved, clean, hard, graded aggregates **for piers** deploying **batching plant, transit mixer and concrete pump** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all lead and all lifts.**	m^3	**6849.00**
WRD: 4.21.2	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **20 mm down** approved, clean, hard, graded aggregates **for abutments** deploying **batching plant, transit mixer and concrete pump** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all lead and all lifts.**	m^3	**6849.00**
WRD: 4.21.3	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **20 mm down** approved, clean, hard, graded aggregates **for columns / bracings of aqueduct sub-structure** deploying **batching plant, transit mixer and concrete pump** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with all **lead and all lifts**.	m^3	**6849.00**
WRD: 4.22	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	20 mm down approved,clean, hard, graded aggregates **for RCC troughs for aqueduct** deploying **batching plant, transit mixer and concrete pump** including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc., complete with **all lead and lifts.** (Refer Note in this chapter)	**m^3**	**10988.00**
Note:	1. For every 1.5 m increase in height of scaffolding beyond 4.5 m from surface add	**m^3**	**444.00**
WRD: 4.23	Providing and constructing **un-coursed rubble stone masonry** with approved stones **in CM 1 : 4** proportion by volume **for sub-structure** portions **of return walls / abutments** including cost of all materials, labour, scaffolding, cleaning, batching and mixing mortar, packing mortar and wedging stone chips into joints, finishing, curing etc., complete with **all lead and lifts upto 1.5 m.**	**m^3**	**4179.00**
Note:	For every 1.5 m additional depth below 1.5 m from surface add	**m^3**	**39.50**
WRD: 4.24	Providing and constructing **un-coursed rubble stone masonry** with approved stones **in CM 1 : 4** proportion by volume **for super-structure** portions **of return walls / abutments** including cost of all materials, labour,scaffolding, ramps, cleaning, batching and mixing mortar, packing mortar and wedging stone chips into joints,finishing,curing etc.,complete with **all lead and lifts upto 1.5 m.**	**m^3**	**4285.00**
Note:	For every 1.5 m additional lift beyond 1.5 m from surface add	**m^3**	**79.00**
WRD: 4.25	Providing and constructing **coursed rubble (size stone) face stone masonry second sort in CM 1 : 4** proportion by volume with stones from approved source including cost of all materials, machinery, labour, scaffolding, ramps,cleaning, batching and mixing mortar, packing mortar and wedging stone chips into joints, finishing, curing etc., complete with **all lead and lifts upto 1.5 m.**	**m^3**	**4226.00**
Note:	For every 1.5 m additional lift beyond 1.5 m from surface add	**m^3**	**79.00**
WRD: 4.26	Providing and constructing **coursed rubble (size stone) face stone masonry first sort in CM 1 : 4** proportion by volume with stones from approved source including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, batching and mixing mortar, packing mortar and wedging stone chips into joints, finishing, curing etc., complete with **all lead and lifts upto 1.5 m. .**	**m^3**	**4402.00**
Note:	For every 1.5 m additional lift beyond 1.5 m from surface add	**m^3**	**79.00**
WRD: 4.27	Providing **cement mortar pointing** to coursed rubble (size stone) face stone masonry **in CM 1 : 2** proportion by volume including cost of all materials, labour, scaffolding, raking and cleaning joints for 50 mm depth, batching and mixing mortar, pressing mortar into joints, finishing, curing etc., complete with **all lead and lifts.**	**m^2**	**163.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	COPING & RAILING WORKS :		
WRD: 4.28.1	Providing and **fixing** 100 mm thick **roughly dressed burnt stone slabs for coping set in CM 1 : 6** proportion by volume **with pointing** to joints **in CM 1 : 3** proportion by volume including cost of all materials, labour, batching and mixing mortar, finishing, curing etc., complete with **all lead and lifts.**	**m^2**	**947.00**
WRD: 4.28.2	Providing and **fixing** 100 mm thick **one line dressed burnt stone slabs for coping set in CM 1 : 6** proportion by volume **with pointing** to joints **in CM 1 : 3** proportion by volume including cost of all materials, labour, batching and mixing mortar, finishing, curing etc., complete with **all lead and lifts.**	**m^2**	**1123.00**
WRD: 4.28.3	Providing and **fixing** 100 mm thick **two line dressed burnt stone slabs for coping set in CM 1 : 6** proportion by volume **with pointing** to joints **in CM 1 : 3** proportion by volume including cost of all materials, labour, batching and mixing mortar, finishing, curing etc., complete with **all lead and lifts.**	**m^2**	**1358.00**
WRD: 4.29.	Providing and constructing **protective railing** consisting of cast in-situ railing posts of size 150 x 150 mm at bottom, 100 x 100 mm at top and 750 mm height, placed approximately at 2 m centre to centre **in M-20** (28 days cube compressive strength not less than 20 N / sq mm) **grade cement concrete** using **20 mm** down approved clean, hard, graded aggregates with each post reinforced by 4 numbers 8 mm dia.main bars embedded in kerb concrete for 400 mm depth and 5 numbers 6 mm dia. stirrups and fixing 3 rows of 40 mm dia. GI pipes with two coats of synthetic enamel painting over a coat of red oxide primer paint including cost of all materials, machinery, labour, formwork, supports, fabricating and placing reinforcement bars, batching, mixing, placing in position, compacting, finishing, curing etc., complete with **all lead and lifts.**	**m**	**1627.00**
	HUME PIPE LAYING & JOINTING WORKS :		
WRD: 4.30.1	**Laying and jointing 300 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., **complete with all lead and lifts.**	**Joint**	**450.00**
WRD: 4.30.2	**Laying and jointing 450 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**543.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 4.30.3	**Laying and jointing 600 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**708.00**
WRD: 4.30.4	**Laying and jointing 700 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**788.00**
WRD: 4.30.5	**Laying and jointing 800 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**958.00**
WRD: 4.30.6	**Laying and jointing 900 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**1015.00**
WRD: 4.30.7	**Laying and jointing 1000 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**1127.00**
WRD: 4.30.8	**Laying and jointing 1100 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**1213.00**
WRD: 4.30.9	**Laying and jointing 1200 mm dia.** NP- 2 class or IRC standard **hume pipes in CM 1 : 2** proportion by volume including cost of all materials (excluding pipes and collars), labour, aligning pipes, batching and mixing mortar, packing joints with hemp and mortar, finishing, curing etc., complete with **all lead and lifts.**	**Joint**	**1435.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 4.31	**Providing rubble / boulder and sand filling** behind abutment and return walls in layers including cost of all materials, labour, watering, ramming **etc., complete with all lead and lifts.**	m^3	**2103.00**
WRD: 4.32.	Providing and **filling murrum / gravely soil** (CNS soil) **for foundation or around pipes** including cost of all materials, labour, spreading soil in layers of 100 to 150 mm, breaking clods, watering, compaction by earth masters to achieve **density control of not less than 90 percent** etc., complete with **all lead and lifts.**	m^3	**702.00**
WRD: 4.33.	Providing and **filling murrum / gravely soil** (CNS soil) **above pipes** including cost of all materials, machinery, labour, spreading soil in layers of 100 to 150 mm thickness, breaking clods, watering, compaction by power roller to achieve **density control of not less than 95 percentm** etc., complete with **all lead and lifts.**	m^3	**437.00**

WATER RESOURCES DEPARTMENT

CHAPTER - WRD:5

TUNNEL AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

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WRD: 5. TUNNEL AND ALLIED WORKS
QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Steel kg	Cement kg	Sand / FA m^3	CA m^3
5.8	25 mm th. Guniting in CM 1:3 propn	m^2	---	16.80	0.030	---
5.9	25 mm dia rock bolt using wedge	m	7.75	---	---	---
5.10	25 mm dia rock bolt using capsule	m	7.45	---	---	---
5.11	Permanent steel supports	t	1025.00	---	---	---
5.12	Temperary steel supports	t	1025.00	---	---	---
			Stone m^3	Cement kg	Sand / FA m^3	CA m^3
5.14	UCR masonry in CM 1:6 propn	m^3	0.975	96.00	0.410	---
			Steel kg	Cement kg	Sand / FA m^3	CA m^3
5.15	Reinforcement steel	t	1025.00	---	---	---
5.16	M-10 CC using 40 mm down CA	m^3	---	220.00	0.470	0.890
5.17	M-20 CC using 40 mm down CA	m^3	---	300.00	0.380	0.850
5.18	M-20 CC using 40 mm down CA	m^3	---	300.00	0.430	0.810

Notes:

`1. The basic rates for item No. 5.16 & 5.17 in this chapter are exclusive of form work, centering and scaffolding charges. Hence additionalities for form work, centering and scaffolding pertaining to cement concrete Item No.5.16 and 5.17 in this chapter shall be added to the finished item rates as per the Appendix -I of volume -I of Uniform Common SR.

WRD: 5. TUNNEL AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	EXCAVATION WORKS :		
WRD: 5.1.	**Excavation for adit** by tunnelling methods in all types of rock including cost of all materials, machinery, labour, ventilation, lighting, drainage, scaling excavated surface, removing and hauling excavated muck outside adit upto specified dump area and all other ancillary operations etc., complete with all **lead and all lifts.**	**m^3**	**1924.00**
WRD: 5.2.	**Excavation for vertical / inclined shaft** in all types of soft / hard rock including cost of all materials, machinery, labour, ventilation, lighting, drainage, scaling excavated surface, removing and hauling excavated muck outside shaft upto specified dump area and all other ancillary operations etc., complete **with all lead and all lifts.**	**m^3**	**2441.00**
WRD: 5.3.	**Excavation for tunnel** by tunnelling methods **in rock not requiring supports** including cost of all materials, machinery, labour, ventilation, lighting, drainage, scaling excavated surface, removing under-cuts, removing and hauling excavated muck outside tunnel upto specified dump area and all other ancillary operations etc., complete with **lead and all lifts.**	**m^3**	**2034.00**
Note:	Where **mucking** is to be carried out through vertical or inclined shaft **using winch and mucking tub** arrangement **increase** the basic **rate** per cum by **8.00 percent.**		
WRD: 5.4.	**Excavation for tunnel** by tunnelling methods including excavation for supports in all types of soil / rock strata **requiring supports** (excluding cost of providing supports) including cost of all other materials,labourmachinery, machinery,ventilation, lighting, drainage, scaling excavated surface, removing and hauling excavated muck outside tunnel upto specified dump area and all other ancillary operations etc., complete with all lead **and all lifts.**	**m^3**	**2139.00**
Note:	Where **mucking** is to be carried out through vertical or inclined shaft **using winch and mucking tub** arrangement **increase** the basic **rate** per cum by **8.00 percent.**		
WRD: 5.5.	**Excavation for tunnel by heading and benching** method of tunnelling including excavation for supports in all types of soil/rock strata **requiring supports** (excluding cost of providing supports) for roof portion before benching including cost of all other materials, machinery, labour, ventilation, lighting, drainage, scaling excavated surface, removing and hauling excavated muck outside tunnel upto specified dump area and		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	all other ancillary operations etc., complete with all lead and **all lifts.**	m^3	**2260.00**
Note:	Where **mucking** is to be carried out through vertical or inclined shaft **using winch and mucking tub** arrangement **increase** the basic **rate** per cum by **8.00 percent.**		
WRD: 5.6	**Removing and hauling muck overfallen** due to natural causes such as geological faults etc., out of tunnel including cost of all materials, machinery, labour, ventilation, drainage, lighting, breaking any large rock fragments if necessary by blasting with all other ancillary operations and disposing off the same in and specified dump area or as directed etc., complete with all lead and all lifts.	m^3	**375.00**
	DEWATERING & GUNITING WORKS :		
WRD: 5.7	**Dewatering tunnel** by pumping out water collected by natural drainage inside tunnel including cost of all materials, machinery, labour,ventilation, lighting, drainage, providing sump and all other ancillary operations wherever necessary etc., complete.	**kwhr**	**37.00**
WRD: 5.8	Providing **25 mm thick guniting to sides and arch of tunnel in CM 1 : 3** proportion by weight including cost of all materials, machinery, labour, ventilation, lighting, drainage and all other ancillary operations etc., complete **with all lead and all lifts.**	m^2	**724.00**
	TEMPERARY & PERMANENT SUPPORTS :		
WRD: 5.9	Providing and fixing 25 mm dia. **steel rock bolts** with **one end** provided with **mechanical / wedge type anchorage** and **other end** provided **with threads** for fixing washers and nuts including cost of all materials, machinery,labour, ventilation, lighting, drainage, drilling 32 mm dia holes, providing 150 mm long 20 mm thick steel tapered wedge, providing 10 mm thick and 200 x 200 mm size plate washer and nuts, driving bolt, fixing washers and nuts, tightening bolt by torque wrench and all other ancillary operations etc., complete with **all lead and all lifts.**	**m**	**1293.00**
WRD: 5.10	Providing and fixing 25 mm diameter **steel rock bolts with resin bond cement capsule anchorage** including cost of all materials, machinery, labour, ventilation, lighting, drainage, drilling 32 mm dia holes, threading one end of bolt for fixing nuts, inserting grout capsule, driving bolt, fixing 10 mm thick 200 x 200 mm size plate washers and nuts, tightening the nuts by torque wrench after hardening of cement grout, and all other ancillary operations etc., complete with all **lead and all lifts.**	**m**	**1282.00**
WRD: 5.11	Providing, fabricating and fixing in position **permanent structural steel supports** as per details including cost of all materials, machinery, labour, cutting, bending, welding, grinding, ventilation, lighting, drainage and all other ancillary operations etc., complete with **all lead and all lifts.**	**t**	**123573.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 5.12	Providing, fabricating and fixing in position **temperary structural steel supports** as per details and dismantling and conveying the same to other place or outside the tunnel before concreting including cost of all materials, machinery, labour, ventilation, lighting, drainage, cutting, bending, welding, grinding, and all other ancillary operations etc., complete **with all lead and all lifts.**	**t**	**27764.00**
WRD: 5.13	**Providing and fixing** hard variety **cut jungle wood for lagging** / blocking locations in tunnel wherever required including cost of all materials, machinery, labour, ventilation, lighting, drainage, fixing in position etc., complete with **all leads and lifts.**	**m^3**	**44177.00**
WRD: 5.14	Providing and constructing **un-coursed rubble stone masonry** using approved stones from tunnel excavated muck **in CM 1 : 6** proportion by volume for **back-filling over cuts / slips** on tunnel sides due to geological faults etc., including cost of all materials, machinery, labour, ventilation, lighting, drainage, cleaning, scaffolding, batching and mixing mortar, packing mortar and wedging stone chips into joints, curing, etc., **complete with all lead and all lifts.**	**m^3**	**3655.00**
	REINFORCEMENT & CONCRETE WORKS : (Shall be read along with the note contained in this chapter regarding additionalites for form work in P.No: 63)		
WRD: 5.15	Providing, fabricating and placing in position **reinforcement steel for tunnel RCC works** including cost of all materials, machinery, labour, ventilation, lighting, drainage, cleaning, straightening, cutting, bending, hooking, lapping / welding joints wherever required, tying with 1.25 mm dia. soft annealed steel wire, etc., complete with **all lead and all lifts.**	**t**	**95311.00**
WRD: 5.16	Providing and laying insitu vibrated **M-10** (28 days cube compressive strength not less than 10 N / sq mm) **grade cement concrete** using **40 mm down** approved, clean, hard, graded **aggregates** crushed from tunnel excavated rock **for filling and levelling over cuts in bed** due to geological faults etc., including cost of all materials, machinery, labour, ventilation, lighting, drainage, cleaning bed, batching and mixing concrete, conveying upto placing point in agitator car, placing in position, levelling, compacting, finishing, curing, and all other ancillary operations etc., complete with **all lead and all lifts.**	**m^3**	**5891.00**
Note:	Rubble stones and stone chips from tunnel excavation for crushing coarse aggregate shall be issued at dump yard at specified issue rates . (this item shall be read along with note in this chapter regarding additionalites for form work)		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 5.17	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sqmm) **grade cement concrete** using **40 mm down** approved clean, hard, graded **aggregates** crushed from tunnel excavated rock **for kerb and bed lining** including cost of all materials, machinery, labour, ventilation, lighting, drainage, formwork, batching and mixing concrete, conveying upto placing point in agitator car, placing in position, levelling, vibrating, finishing, curing, and all other ancillary operations etc., complete with **all lead and lifts.**	**m^3**	**5970.00**
Note:	Rubble stones and stone chips from tunnel excavation for crushing coarse aggregate shall be issued at dump yard at specified issue rates. (this item shall be read along with note in this chapter regarding additionalites for form work)		
WRD: 5.18	Providing and laying insitu vibrated **M-20** (28 days cube compressive strength not less than 20 N / sqmm) **grade cement concrete** using **40 mm down** approved clean, hard, graded **aggregates** crushed from tunnel excavated rock **for sides and arch lining** including cost of all materials, machinery, labour, ventilation, lighting, drainage, formwork, rail mounted shuttering gantry, batching and mixing concrete, conveying upto placing point in agitator car, placing in position using placer pump, levelling, vibrating, finishing, curing, and all other ancillary operations etc., complete with **all lead and lifts.**	**m^3**	**8828.00**
Note:	Rubble stones and stone chips from tunnel excavation for crushing coarse aggregate shall be issued at dump yard at specified issue rates.		
WRD: 5.19	**Drilling** 35 mm diameter **grout holes** in concrete / rock by percussion drilling using jack hammer or stooper drills as directed to specified depth **for consolidation / contact grouting** including cost of all materials, machinery, labour, ventilation, lighting, drainage, cleaning holes, and all other ancillary operations etc., complete.	**m**	**385.00**
WRD: 5.20	**Drilling** 75 mm diameter **drainage holes** vertical or inclined in rock / concrete in tunnel by percussion drilling using waggon drill or other suitable drilling equipment including cost of all materials, machinery, labour, ventilation, lighting, drainage etc., complete.	**m**	**462.00**

WATER RESOURCES DEPARTMENT

CHAPTER - WRD:6

GATE / HOIST AND ALLIED WORKS SCHEDULE OF RATES

FOR THE YEAR : 2021-22

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WRD: 6. GATE / HOIST AND ALLIED WORKS
NOTES ON SCHEDULE OF RATES

1 All materials / bought out components for embedded parts, gates, hoists and allied works shall conform to relevant Indian Standards / Technical specifications and approved drawings.

2 The basic rates are inclusive of preparation of designs / drawings / bill of materials etc., as per specifications and other technical data including revisions.

3. The basic rates are inclusive of cost of all materials, machinery, labour, fabrication, erection, commissioning and testing of gates, hoists and other related components as per technical specifications.

4. The basic rates are inclusive of taxes, duties, levies and all other incidental charges except GST on works contract. Separate provision shall be made in the estimate towards GST on Works contract at the rate prevailing at the time of preparation of estimate.

5. The basic rates are inclusive of rehandling at fabrication and erection sites.

6. Unless otherwise specified the basic rates are inclusive of standard finish required for all the fabricated and bought out gate and hoist components.

7 The basic rates are inclusive of preparatory works such as rectification of damages, repairing shop painting, cleaning, positioning and anchoring first stage embedments, cleaning surface for field painting etc.

8. The basic rates are exclusive of cost of river diversion dewatering, desilting etc.

9. Unless otherwise specified , the basic rates for all items are on per tonne basis. The rate per set or per number shall be worked out on the basis of rate per tonne and the tonnage computed as per detailed designs or as per empirical formulae furnished in the " Note " under each item.

10. Minimum dry film thickness for zinc rich epoxy primer paint and coal tar epoxy paint shall be 40 microns per coat and 100 microns per coat respectively.

WRD: 6. GATE / HOIST AND ALLIED WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	GATES AND HOISTS FOR DAM :		
WRD: 6.1.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of sill beam, wall plates, seal seats, anchors, anchor girders, yoke girders,tie flats, trunnion supports,rope and pulley supports etc., with all accessories **for spillway radial gates** including cost of all materials, machinery,labour, cutting,aligning,anchoring, welding,finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold appliedcoal tar epoxy paint etc., complete as per specifications and approved drawings with **lead and all leads and lifts including packing / forwarding charges for other materials.**	**t**	**172200.00**
Note:	1. Wt of 1 set embedded parts in tonnes = $0.0177 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length in m = Clear distance between piers. (H) is height of radial gate in m = FRL - Sill level + 0.15 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 97.9 % of computed weight of 1 set		
WRD: 6.2.	Design, fabrication, supply, erection, testing and commissioning of **radial gate** consisting of skin plate, stiffeners, horizontal girders, sector arms, trunnion assemblies, tie beam, pulley supports, bracings, rubber seals, clamps etc., with all accessories **for spillway** including cost of all materials, machinery,labour,cutting, bending,aligning,anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and and lifts **including packing / forwarding charges for other materials.**	**t**	**200100.00**
Note:	1. Weight of 1 spillway gate in tonnes = $0.0710 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length in m = Clear distance between piers. (H) is height of radial gate in m = FRL - Sill level + 0.15 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 92.5 % of computed weight of 1 gate		
WRD: 6.3.	Design, fabrication, supply, erection, testing and commissioning of electrically operated **rope drum hoist** of adequate capacity consisting of base frames, rope drums, connecting shaft, gear system, brake system, electric motor, wire ropes, gate position indicator, manual operation arrangement etc., with all accessories **for spillway radial gate** including cost of all materials, machinery, labour, cutting, aligning,		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	anchoring, welding, finishing, cleaning, greasing, providing hand railing and approach staircase with gate to hoist platform, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications and approved drawings with all lead and all lifts for structural steel components and **all leads and lifts including packing / forwarding charges for other materials.**	**t capacity**	**46100.00**
Note:	1. Hoist capacity in t including 25 % reserve capacity = 1.5 x Wt of gate (Hoist capacity shall be rounded off to next 10 tonne) Weight of hoist with all accessories :175 kg per tonne capacity of hoist. 2. Quantity of structural steel = 39.2 % of computed weight of 1 hoist		
WRD: 6.4.	Design, fabrication, supply, erection and commissioning of 1 metre wide **catwalk** connecting spillway piers / abutments **at trunnion platform level** including cost of all materials, machinery, labour, cutting, aligning welding, anchoring, finishing, cleaning, applying one coat of zinc rich epoxy primer and two coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with**all leads and lifts including packing / forwarding charges for other materials.**	**m**	**32500.00**
Note:	1. Weight of catwalk : 300 kg per metre length of catwalk. 2. Quantity of structural steel = 95.6 % of computed weight per m length		
WRD: 6.5.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of sill beam, slide tracks, seal seats, guide rails, dogging sets for storage of stoplog elements etc., with all accessories for spillway stop log gate elements including cost of all materials, machinery,labour, cutting, aligning, welding,anchoring, finishing,cleaning, applying one coat of zinc rich epoxy primer and fourcoats of cold applied coal tar epoxy paint etc., complete as per specifications and approved **drawings with all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**276100.00**
Note:	1. Wt of 1 set embedded parts in tonnes = $0.0025 \times (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers + 0.65 m. (H) is total height of stoplog gate in m = FRL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 83.8 % of computed weight of 1 set		
WRD: 6.6.	Design, fabrication, supply, erection, testing and commissioning of vertical lift sliding type all interchangeable (except bottom element) **stoplog gate elements** consisting of skin plate, horizontal and vertical girders, stiffeners, lifting pins, bronze padded slide blocks, guide shoes,		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	rubber seals, clamps etc., with all accessories **for spillway** including cost of all materials,machinery, labour,cutting,aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and all lifts including **packing / forwarding charges for other materials.**	**t**	**143700.00**
Note:	1. Total wt of 1 set stoplog elements in t = $0.0553 \times (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers + 0.65 m. (H) is total height of stoplog gate in m = FRL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 99.3 % of computed weight of 1 set		
WRD: 6.7.	Design, fabrication, supply, erection, testing and commissioning of automatic **lifting beam** with all accessories for handling, lowering and lifting of **spillway stop log gate elements** including cost of all materials, machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and two coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts for structural steel **components and all leads and lifts including packing / forwarding charges for other components / materials.**	**t**	**164900.00**
Note:	1. Weight of lifting beam in tonnes = $0.02212 \times (L^2 \times H \times h)^{0.716} / n$ Where (L) is length = Clear distance between piers + 0.65 m. (H) is total height of stoplog gate in m = FRL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FRL - Sill level (n) is number of gate elements in 1 set 2. Quantity of structural steel = 94.1 % of computed weight of 1 No.		
WRD: 6.8.	Design, fabrication, supply, erection, testing and commissioning of adequate capacity Class - II type **moving gantry crane** consisting of rail mounted gantry frame, top platform with hand railing, long / cross travel arrangements, rope drums, gear systems, electric motors, electro-magnetic brake system,cabin, control panel, wire rope, ladder, motorised cable reeling drum etc., with all accessories **for operating spillway stop log gate elements** and **river sluice / canal sluice emergency gates** including cost of all materials, machinery, labour, cutting, bending, aligning, anchoring, welding, finishing, cleaning, greasing, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel pain etc., complete as per specifications and approved drawings with **all lead and lifts for including packing / forwarding charges for other materials.**	**t capacity**	**262600.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
Note:	1. Capacity of gantry crane in tonnes including 25 % reserve capacity = 2.5 x (Weight of 1 set of stoplog gate / Number of elements). (Hoist capacity shall be rounded off to next 5 tonne) Weight of moving gantry crane : .25 tonne per tonne capacity of gantry. 2. Quantity of structural steel = 70.4 % of computed weight of gantry.		
WRD: 6.9.	Design, fabrication, supply, erection and commissioning of **rail track** using 45 kg / m standard rails on spillway bridge **for movement of gantry crane** for handling and operating spillway stoplog gate elements / river sluice / canal sluice emergency gate including cost of all materials, machinery, labour, aligning, anchoring, welding, cleaning, applying one coat of zinc rich epoxy primer and two coats of cold applied coal tar epoxy paint for buffers and rail supporting plates etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**m**	**8700.00**
Note:	1. Weight of gantry track including fixtures : 100 to 105 kg / Rm of track. (Weight per metre includes rails with fixtures on both sides) 2. Quantity of structural steel = 5.3 % of computed weight of track.		
WRD: 6.10.	Design, fabrication, supply, erection and commissioning of **embedded parts (without groove liner)** consisting of sill beam, wheel tracks, seal seats, guide rails, breast wall liner (upto one vent height plus 1 m above the roof of vent) etc., with all accessories **for river / canal sluice service gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with **all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**217600.00**
Note:	1. Wt of 1 set embedded parts in tonnes = $0.0444 \times (L^2 \times H \times h)^{0.659}$ Weight of breast wall lining : 250 kg / sqm of breast wall Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 85.0 % of computed weight of 1 set.		
WRD: 6.11.	Design, fabrication, supply, erection and commissioning of **embedded parts (with groove liner upto breast wall level)** consisting of sill beam, wheel tracks, seal seats, guide rails, breast wall liner (upto one vent height plus 1 m above the roof of vent) etc., with all accessories **for river / canal sluice service gate** including cost of all materials, machinery, labour, cutting, aligning,anchoring, welding,finishing,cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	approved drawings with all lead and all lifts including packing / forwarding **charges for other materials.**	**t**	**175700.00**
Note:	1. Wt of 1 set embedded parts in tonnes $= 0.0444 \times (L^2 \times H \times h)^{0.659}$ Weight of breast wall lining : 250 kg / sqm of breast wall Weight of groove liner : 200 kg / sqm of groove lining Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 90.5 % of computed weight 1 set.		
WRD: 6.12.	Design, fabrication, supply, erection and commissioning of **vent liner** using 20 mm thick plates with stiffeners and anchors **for river sluice / canal sluice** vents including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat zinc rich epoxy primer and four coats cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with **all lead and all lifts including packing / forwarding charges for for other materials.**	**m^2**	**26500.00**
Note:	1. Weight of vent liner including stiffeners /anchors : 200 kg / sqm area. 2. Quantity of structural steel = 100.0 % of computed weight		
WRD: 6.13.	Design, fabrication, supply, erection, testing and commissioning of fixed wheel type vertical lift **service gate** consisting of skin plate, vertical and horizontal girders, wheels, stiffeners, lifting brackets, guide rollers, ballast blocks, teflon cladded rubber seals etc., with all accessories **for river sluice /canal sluice** vent including cost of all materials,machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and all lifts including packing / forwarding charges for other materials.	**t**	**144600.00**
Note:	1. Wt of 1 gate in tonnes (including ballast) $= 0.0888 (L^2 \times H \times h)^{0.659}$ Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 47.5 % of computed weight of 1 gate.		
WRD: 6.14.	Design, fabrication, supply, erection, testing and commissioning of adequate capacity **rope drum hoist** consisting of hoist platform, rope		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	drum, gear system, electric motor, electro-magnetic brake system, hand operation assembly, control panel, wire rope, pulleys, ladder etc., with all accessories **for operating river sluice / canal sluice service gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, greasing, applying one coat zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications and approved drawings with **all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**57600.00**
Note:	1. Capacity of hoist in tonnes including 25 % reserve capacity = 2.5 x Weight of gate including ballast. (Hoist capacity shall be rounded off to next 5 tonne) Weight of hoist with all accessories: 250 kg per tonne capacity of hoist 2. Quantity of structural steel = 34.0 % of computed weight of 1 hoist.	**capacity**	
WRD: 6.15.	Design, fabrication, supply, erection and commissioning of **embedded parts (without groove liners)** consisting of sill beam, wheel tracks, seal seats, guide rails, breast wall liner upto 1m height above the roof of vent etc., with all accessories **for river / canal sluice emergency gate** including cost of all materials,machinery,labour, cutting, aligning,welding anchoring, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts including **packing / forwarding charges for other components / materials.**	**t**	**229500.00**
Note:	1. Wt of 1 set embedded parts in tonnes = $0.0444 \times (L^2 \times H \times h)^{0.659}$ Weight of breast wall lining : 250 kg per sqm of breast wall Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 87.0 % of computed weight of 1 set.		
WRD: 6.16.	Design, fabrication, supply, erection and commissioning of **embedded parts (with groove liners)** consisting of sill beam, wheel tracks, seal seats, guide rails, breast wall liner (upto 1 m above the roof of vent), groove liner upto breast wall level etc., with all accessories **for river / canal sluice emergency gate** including cost of all materials, machinery labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts for structural steel components and **all leads and lifts including packing / forwarding charges for other materials.**	**t**	**176800.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
Note:	1. Wt of 1 set embedded parts in tonnes = $0.0600 \times (L^2 \times H \times h)^{0.659}$ Weight of breast wall lining : 250 kg / sqm of breast wall Weight of groove liner : 200 kg / sqm of groove lining Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 92.7 % of computed weight of 1 set.		
WRD: 6.17.	Design, fabrication, supply, erection, testing and commissioning of fixed wheel type vertical lift **emergency gate** consisting of skin plate, horizontal and vertical girders, wheels, stiffeners, lifting brackets, guide rollers, ballast blocks, teflon cladded rubber seals etc.,with all accessories **for river sluice / canal sluice** vent including cost of all materials, machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and all lifts including packing / forwarding **charges for other materials.**	**t**	**143600.00**
Note:	1. Wt of 1 gate in tonnes (including ballast) = $0.0888 (L^2 \times H \times h)^{0.659}$ Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 46.7 % of computed weight of 1 gate.		
WRD: 6.18.	Design, fabrication, supply, erection, testing and commissioning of **automatic lifting beam** with all accessories for handling, lowering and lifting of **river sluice / canal sluice emergency gate** including cost of all materials, machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and two coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts including packing / forwarding **charges for other materials.**	**t**	**203400.00**
Note:	1. Weight of lifting beam in tonnes = $0.0090 \times (L^2 \times H \times h)^{0.659}$ Where (L) is length = Clear vent opening in m + 0.70 m. (H) is height of gate in m = Clear vent height in m + 0.30 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 76.3 % of computed weight of 1 beam.		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	GATES AND HOISTS FOR BARRAGE :		
WRD: 6.19.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of sill beam, wheel tracks, seal seats, guide rails etc., with all accessories **for vertical lift barrage gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other components / materials.**	**t**	**266700.00**
Note:	1. Wt of 1 set of embedded parts in tonnes = $0.0055 (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 1 m. (H) is total height of gate in m = FRL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 82.3 % of computed weight of 1 set.		
WRD: 6.20.	Design, fabrication, supply, erection, testing and commissioning of **fixed wheel type vertical lift gate** consisting of skin plate, vertical and horizontal girders, wheels, stiffeners, lifting brackets, guide shoes, rubber seals etc., with all accessories **for barrage** including cost of all materials, machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**t**	**154900.00**
Note:	1. Weight of 1 gate in tonnes = $0.0335 (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 1 m. (H) is total height of gate in m = FRL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FRL - Sill level 2. Quantity of structural steel = 96.7 % of computed weight of 1 gate.		
WRD: 6.21.	Design, fabrication, supply, erection and commissioning of **structural steel hoist bridge** consisting of columns, beams, bracings, stiffeners, ties, chequered plate covering, hand railing, ladder etc., with all other accessories **for supporting rope drum hoist for operating barrage gates** including cost of all materials,machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications and approved drawings with **all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**139400.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
Note:	1. Columns (with bracings/anchors/stiffeners) : 400 kg per metre height Beams (with cross beams / stiffeners) : 400 kg per metre span Railing / Chequered plate / Ladder etc : 10 % of wt columns / beams Weight proposed includes all columns / beams for 1 hoist. 2. Quantity of structural steel = 97.8 % of computed weight for 1 span.		
WRD: 6.22.	Design, fabrication, supply, erection, testing and commissioning of adequate capacity **rope drum hoist** consisting of hoist platform, rope drums, shafts, pulleys, gear system, electric motor, electro-magnatic brake system, manual operation assembly,gate position indicator,control panel, wire rope etc., with all accessories **for operating vertical lift roller gate for barrage** including cost of all materials,machinery,labour, cutting, bending, aligning,anchoring, welding, finishing, cleaning,greasing, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications and **approved drawings with all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**43600.00**
Note:	1. Capacity of hoist in t with 25 % reserve capacity =1.5 x Wt of gate. (Hoist capacity shall be rounded off to next 10 tonne) Weight of hoist with all accessories :100 kg per tonne capacity of hoist 2. Quantity of structural steel = 12.4 % of computed weight for 1 hoist.	**capacity**	
	AUTOMATIC OUTFLOW REGULATING GATE FOR BARRAGE / ESCAPE:		
WRD: 6.23.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of sill beam, wall plates, seal seats, first stage anchors, anchor girders, anchor bars, trunnion supports etc., with all accessories **for outflow regulating automatic gates** for **barrage/escape** including cost of all all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and **all lifts for including packing / forwarding charges for other materials.**	**t**	**202000.00**
Note:	1. Weight of 1 set embedded parts in tonnes = $0.046 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length = Clear distance between piers in m. (H) is height of gate in m = FSL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 94.0 % of computed weight for 1 set.		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 6.24.	Design, fabrication, supply, erection, testing and commissioning of **automatic outflow regulating gate** and **fulcrum assembly** consisting of skin plate, stiffeners, horizontal girders, trunnion assemblies, gate bracket, base plate, rolling surface assembly, link brackets, link assembly, rubber seals, seal clamps etc., with all accessories for **barrage / escape** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**t**	**159300.00**
Note:	1. Wt of gate & fulcrum assembly in tonnes = $0.1325 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length = Clear distance between piers in m. (H) is height of gate in m = FSL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 94.2 % of computed weight for 1 gate.		
WRD: 6.25.	Design, fabrication, supply, erection, testing and commissioning of **hoisting cum damping system** consisting of low level horizontal lever link, low level long actuating lever, high level vertical lever link, high level short actuating lever, high level hoisting bracket, axle for lever system, friction shoes, supporting box for shoes, rack assembly, ratchet pawl, supporting structure, bracket plate etc., with all accessories for **outflow regulating automatic gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**t**	**217000.00**
Note:	1. Weight of hoisting cum damping system in tonnes $= 0.0695 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length = Clear distance between piers in m. (H) is height of gate in m = FSL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 94.2 % of computed weight for 1 gate.		
	GATES AND HOISTS FOR CANAL REGULATORS :		
WRD: 6.26.	Design, fabrication, supply, erection and commissioning of **embedded** parts consisting of sill beam, wall plates, first stage anchors, anchor girders, anchor bars, trunnion supports, wire rope / pulley supports etc., with all accessories **for canal regulator radial gates** including cost		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing,cleaning,applying one coat zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**t**	**172500.00**
Note:	1. Weight of 1 set embedded parts in tonnes = $0.092 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length = Clear distance between piers in m. (H) is height of gate in m = FSL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 95.1 % of computed weight for 1 set.		
WRD: 6.27.	Design, fabrication, supply, erection, testing and commissioning of **radial gate** consisting of skin plate, stiffeners, horizontal girders, sector arms, trunnion assemblies, tie beam, pulley supports, bracings, rubber seals, seal clamps etc., with all accessories **for canal regulator** including cost of all materials, machinery, labour, cutting, bending, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**t**	**169100.00**
Note:	1. Weight of 1 radial gate in tonnes = $0.1685 \times (L^2 \times H \times h)^{0.673}$ Where (L) is length = Clear distance between piers in m. (H) is height of gate in m = FSL - Sill level + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 94.3 % of computed weight for 1 gate.		
WRD: 6.28.	Design, fabrication, supply, erection, testing and commissioning of adequate capacity **electrically operated rope drum hoist** consisting of hoist platforms, rope drums,connecting shaft,gear system,electric motor, electro- magnetic brake system,control panel, pulleys, wire rope, manual operation system, railing, ladder etc., with all accessories **for operating canal regulator radial gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning ,greasing, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications **and approved drawings with all lead and all lifts** **including packing / forwarding charges for other materials.**	**t**	**70500.00**
Note:	1. Capacity of hoist in t with 25 % reserve capacity =2.00 x Wt of gate. (Hoist capacity shall be rounded off to next 5 tonne) Weight of hoist with all accessories: 300 kg per tonne capacity of hoist 2. Quantity of structural steel = 66.4 % of computed weight for 1 hoist.	**capacity**	

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 6.29.	Design, fabrication, supply, erection, testing and commissioning of adequate capacity **manually operated rope drum hoist** consisting of hoist platforms, rope drums,connecting shaft,gear system,brake system, pulleys, wire rope, manual operation system, railing, ladder etc., with all accessories **for operating canal regulator radial gate** including cost of all materials, machinery, labour, cutting, aligning anchoring, welding, finishing, cleaning, greasing, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications and approved drawings with **all lead and all lifts including packing / forwarding charges for other materials.**	**t capacity**	**64100.00**
Note:	1. Capacity of hoist in t with 25 % reserve capacity =2.00 x Wt of gate. (Hoist capacity shall be rounded off to next 5 tonne) Weight of hoist with all accessories: 275 kg per tonne capacity of hoist 2. Quantity of structural steel = 66.4 % of computed weight for 1 hoist.		
WRD: 6.30.	Design, fabrication, supply, erection and commissioning of **embedded parts (with top seal seat)** consisting of sill beam, wheel tracks, seal seats, guide rails, groove lining upto top etc., with all accessories **for vertical lift roller gate for canal escape / regulator** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complets as per specifications and approved drawings with all lead and all lifts **including packing / forwarding charges for other materials.**	**t**	**188800.00**
Note:	1. Wt of 1 set of embedded parts in tonnes = $0.1332 \times (L^2 \times H \times h)^{0.659}$ Where (L) is length = Clear vent width in m + 0.50 m. (H) is height of gate in m = Clear vent height in m + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 95.4 % of computed weight for 1 set.		
WRD: 6.31.	Design, fabrication, supply, erection, testing and commissioning of **fixed wheel type vertical lift gate (with top seal)** consisting of skin plate, siffeners, horizontal and vertical girders, wheels, guide rollers, rubber seals etc., with all accessories **for canal escape / regulator** vent including cost of all materials,machinery,labour,cutting, aligning, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all **lead and all lifts including packing / forwarding charges for other materials.**	**t**	**172800.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
Note:	1. Weight of 1 gate in tonnes = $0.0888 (L^2 \times H \times h)^{0.659}$ Where (L) is length = Clear vent width in m + 0.50 m. (H) is height of gate in m = Clear vent height in m + 0.20 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 92.1 % of computed weight for 1 gate.		
WRD: 6.32.	Design, fabrication, supply, erection, testing and commissioning of adequate capacity **screw type hoist** consisting of supporting structure, platform, railing, ladder etc., with all accessories **for operating canal escape / regulator gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, greasing, applying two coats of zinc chromate red oxide primer and three coats of approved synthetic enamel paint etc., complete as per specifications and approved drawings with all **lead and all lifts including packing / forwarding charges for other materials.**	**t capacity**	**44900.00**
Note:	1. Capacity of hoist in t with 25 % reserve capacity =2.50 x Wt of gate. (Hoist capacity shall be rounded off to next 1 tonne) Weight of hoist with all accessories: 300 kg per tonne capacity of hoist 2. Quantity of structural steel = 61.2 % of computed weight for 1 hoist.		
WRD: 6.33.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of sill beam, wheel tracks, seal seatss, guide rails, gate groove liners etc., with all accessories **for canal escape / regulator stoplog gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all **lead and all lifts for including packing / forwarding charges for other materials.**	**t**	**183300.00**
Note:	1.Wt of 1 set of embedded parts in tonnes = $0.0665 \times (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 0.50 m. (H) is total height of stoplog gate in m = FSL - Sill level + 0.30 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 95.9 % of computed weight for 1 set.		
WRD: 6.34.	Design, fabrication, supply, erection, testing and commissioning of sliding type interchangeable **stoplog gate elements** consisting of skin plate, stiffeners, horizontal and vertical girders, lifting hooks, bronze		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	padded slide blocks, guide shoes, rubber seals etc., with all accessories for canal regulator vent including cost of all materials, machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coats of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc.,complete as per specifications and approved drawings **with all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**163100.00**
Note:	1. Wt of 1 set of stoplog elements in tonnes = $0.0995 (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 0.50 m. (H) is total height of stoplog gate in m = FSL - Sill level + 0.30 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 98.5 % of computed weight for 1 gate.		
	GATES AND HOISTS FOR PUMP HOUSE INTAKE:		
WRD: 6.35.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of liners **for trash rack grooves** (for coarse and fine screens) with all accessories **for pump house intake structure** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all **lead and all lifts including packing / forwarding charges for other materials.**	**t**	**173000.00**
Note:	1. Wt of 1 set of embedded parts in tonnes = 100 to 125 kg / m height 2. Quantity of structural steel = 100.0 % of computed weight for 1 set.		
WRD: 6.36.	Design, fabrication, supply, erection and commissioning of **trash racks** consisting of a number of panels of suitable height with vertical trash bars welded to structural steel frame at wider interval and provided with weld mesh frame **for pump house intake structure** including cost of all materials,machinery, labour, cutting, aligning, welding, finishing,cleaning, applying one coat of zinc rich epoxy primer and four coats cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all **lead and all lifts including packing / forwarding charges for other materials.**	**t**	**135800.00**
Note:	1. Wt of trash rack panels for 1 vent in t = $0.0375 \times (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 0.20 m.		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	(H) is total height of trash rack panels in m (h) is head of water above sill of trash rack in m = FSL - Sill level 2. Quantity of structural steel = 100.0 % of computed weight.		
WRD: 6.37.	Design, fabrication, supply, erection and commissioning of **embedded parts** consisting of sill beam, wheel tracks, seal seats, guide rails, gate groove liners etc., with all accessories **for pump house intake stoplog gate** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing,cleaning, applying one coat zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with all **lead and all lifts including packing / forwarding charges for other materials.**	**t**	**183300.00**
Note:	1.Wt of 1 set of embedded parts in tonnes = $0.0665 \times (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 0.50 m. (H) is total height of stoplog gate in m = FSL - Sill level + 0.30 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 95.9 % of computed weight for 1 set.		
WRD: 6.38.	Design, fabrication, supply, erection, testing and commissioning of sliding type **stoplog gate** consisting of skin plate, horizontal and vertical girders, lifting hooks, bronze padded slide blocks,stiffeners, guide shoes, rubber seals etc., with all accessories **for pump house intake** vent including cost of all materials, machinery, labour, cutting, aligning, welding, finishing, cleaning, applying one coats of zinc rich epoxy primer and three coats of cold applied coal tar epoxy paint, seal fixing etc., complete as per specifications and approved drawings with all **lead and all lifts including packing / forwarding charges for other materials.**	**t**	**163100.00**
Note:	1. Wt of 1 stoplog gate in tonnes = $0.0995 (L^2 \times H \times h)^{0.716}$ Where (L) is length = Clear distance between piers in m + 0.50 m. (H) is total height of stoplog gate in m = FSL - Sill level + 0.30 m (h) is head of water above sill of gate in m = FSL - Sill level 2. Quantity of structural steel = 98.5 % of computed weight for 1 gate.		
WRD: 6.39.	Design, fabrication, supply, erection and commissioning of **electrically operated mono-rail hoist assembly** consisting of electric motor, rope drum, gear system, wire rope with lifting attachment, festoon cabling etc., with all accessories **for operating pump house stop-log gate** including cost of all materials (excluding providing mono-rail hoist		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	supporting structure and mono-rail with fixtures), machinery, labour, cleaning, greasing etc., complete as per specifications and approved drawings with **all leads and lifts.**	**t**	**51800.00**
Note:	1. Hoist capacity = 1.50 x weight of stop-gate	**capacity**	
WRD: 6.40.	Design, fabrication, supply, erection and commissioning of **structural steel hoist supporting structure** consisting of columns, cross beams, bracings, stiffeners, mono-rail with fixtures etc., with all accessories **for electrically operated monorail rope drum hoist for operating pump house intake vertical lift gates** including cost of all materials, machinery, labour, cutting, aligning, anchoring, welding, finishing, cleaning, applying two coats of zinc chromate red oxide primer and three coats of synthetic enamel paint etc., complete as per specifications and **approved drawings with all lead and all lifts including packing / forwarding charges for other materials.**	**t**	**139400.00**
Note:	1. Columns with bracings / anchors / stiffeners: 150 kg per metre height. Weight proposed above is for each intake vent 2. Mono rail beam with cross beams : 100 kg per metre length 3. Quantity of structural steel = 97.8 % of computed weight for 1 span.		
WRD: 6.41.	Design, fabrication, supply, erection, testing and commissioning **EOT** crane consisting of double girder box type construction, rail mounted end carraiges with long and cross travel arrangement, main and auxiliary hoists of specified capacity, rails, pendant control, gear boxes, electric motors, brakes, rope drums, wire ropes, sheaves, end buffer stoppers, pendant operated DSL bus bars with all accessories for main and auxiliary hoists **for handling pumps and accessories in pump house** including cost of all materials,machinery, labour,cutting, aligning,welding, finishing, cleaning, greasing, applying two coats of zinc chromate red oxide primer and three coats of synthetic enamel paint etc., complete as perspecifications and approved drawings with **all leads and lifts .**	**t**	**197000.00**
Note:	1. EOT crane Main hoist capacity = 1.25 x Maximum lifting load in tonne 2. EOT crane auxiliary hoist capacity = 10 % of main hoist 3.. Rate for EOT crane shall be based on capacity of main hoist.	**capacity**	

WATER RESOURCES DEPARTMENT

CHAPTER - WRD:7

PRILIMINARY AND MAINTENANCE WORKS SCHEDULE OF RATES

FOR THE YEAR : 2021-22

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SCHEDULE OF RATES FOR ITEMS 88-- 95

WRD: 7. PRELIMINARY & MAINTENANCE WORKS
QUANTITY OF MATERIALS

Item No.	Description of work	Unit	Quantity of materials required per unit quantity of work			
WRD:			Murum m^3	Cement kg	Sand / FA m^3	Stone m^3
7.7	200x200x750 mm boundary stone fixing	each	0.055	---	---	0.030
			Stone m^3	Cement kg	Sand / FA m^3	CA m^3
7.8	Temperary BM in CC 1:4:8	each	0.030	9.10	0.025	0.050
7.9	Permanent BM in CC 1:3:6 with UCR wall	each	0.320	262.00	0.600	1.000
7.11	Reconstruction of revetment	m^2	---	---	0.153	---
7.12	Reconstruction of rock-toe	m^3	---	---	0.098	---
7.13	Resetting Shahbad slabs in CM 1:3	m^2	---	1.00	0.002	---
			Soil m^3	Cement kg	Sand / FA m^3	CA m^3
7.17	Impervious hearting with borrow area soil	m^3	1.20	---	---	---
7.18	Semipervious casing with borrowarea soil	m^3	1.20	---	---	---
7.19	Impervious hearting using dump area soil	m^3	1.20	---	---	---
7.20	Semipervious casing using dumparea soil	m^3	1.20	---	---	---
7.24	Cleaning gates by sand blasting	m^2	---	---	0.300	---

WRD: 7. PRELIMINARY AND MAINTENANCE WORKS
SCHEDULE OF RATES
FOR THE YEAR : 2021-22

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 7.1.	**Cutting and stacking bamboos** excluding removing stumps and roots etc., complete with all lead and all lifts.	**each**	**20.00**
WRD: 7.2.1	**Cutting and removing jauliflora** bushes **upto 1.50 m girth** excluding removal of stumps and including burning or disposing off the materials as directed with all lead and all lifts.	**each**	**19.50**
WRD: 7.2.2	**Cutting and removing jauliflora** bushes **above 1.50 m upto 3.00 m girth** excluding removal of stumps and including burning or disposing off the materials as directed with all lead and all lifts.	**each**	**39.00**
WRD: 7.3	**Cutting and burning or disposing off Apu / Jondu** from marshy areas as directed with all lead and all lifts.	**m^2**	**7.20**
	PRELIMINARY WORKS :		
WRD: 7.4.	Conducting **geophysical investigation** studies by electrical resistivity method in stages of 5 m or as directed for sub-surface details such as depth of formations, shear zones, classification of strata, depth of water table etc., including cost of all materials, equipments, labour, analysing and reporting details of field studies conducted etc., complete excluding cost of transportation arrangements.	**stage**	**357.00**
WRD: 7.5.	**Drilling 80 mm dia hole through over-burden** using casing shoe bit vertical or inclined upto 10 degrees to vertical as directed including cost of all materials, machinery, labour, water charges, reaming, collection of wash samples at suitable intervals, logging and lebelling, supplying honne wood core box, fixing casing pipes (excluding cost of casing pipes) etc., complete **for depth upto 30 m from surface.**	**m**	**1491.00**
Note:	1. For driiling through over-burden beyond 30 m from surface increase the rate per Rm by 10 percent. 2. For providing HDPE or light black MS casing pipe add the cost of pipe per Rm.		
WRD: 7.6.1	**Drilling 76 mm dia (NX) core hole in hard rock** using diamond core bit vertical / inclined upto 10 degree to vertical as directed including cost of all materials, machinery, labour, water charges, collection of core samples, logging and labelling samples, supplying honne wood core box including cement grouting and redrilling in case of collapse of sides (excluding cost of cement for grouting) etc., complete **for depth upto 30 m from surface.**	**m**	**7418.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
Note:	1. For driiling in hard rock **beyond 30 m upto 60 m** from surface **increase** the basic rate **per Rm** for drilling upto 30 m **by 25 percent.** 2. For driiling in hard rock **beyond 60 m upto 90 m** from surface **increase** the basic rate **per Rm** for drilling upto 30 m **by 40 percent.**		
WRD: 7.6.2	**Drilling 47 mm dia (BX) core hole in hard rock** using diamond core bit vertical / inclined upto 10 degree to vertical as directed including cost of all materials, machinery, labour, water charges, collection of core samples, logging and labelling samples, supplying honne wood core box including cement grouting and redrilling in case of collapse of sides (excluding cost of cement for grouting) etc., complete **for depth upto 30 m from surface.**	**m**	**7125.00**
Note:	1. For driiling in hard rock **beyond 30 m upto 60 m** from surface **increase** the basic rate **per Rm** for drilling upto 30 m **by 25 percent.** 2. For driiling in hard rock **beyond 60 m upto 90 m** from surface **increase** the basic rate **per Rm** for drilling upto 30 m **by 40 percent.**		
WRD: 7.7.	**Providing and fixing** 200 x 200 x 750 mm roughly dressed **boundary / demarcation / chainage/ arrow stones** including cost of all materials, labour, engraving marks, excavating pit, fixing in position, murum filling etc., complete with **lead upto 50 m and all lifts.**	**each**	**218.00**
WRD: 7.8.	**Providing** and fixing 200 x 200 x 750 cm size **temporary bench mark** stone in CC 1 : 4 : 8 proportion by volume using 40 mm down clean,hard, graded aggregates including cost of all materials, labour, dressing top surface of stone and engraving BM data, excavating pit, batching and mixing concrete,placing concrete around stone and compacting,finishing, **curing etc., complete with all lead and all lifts.**	**each**	**698.00**
Note:	For providing 300 mm thick compacted murum bed in B.C soil area including additional excavation for thickness of murum bedding add.	**each**	**16.00**
WRD: 7.9.	**Providing** and fixing 200 x 200 x 750 mm size **permanent bench mark** stone in 900 x 900 x 1200 mm size block of CC 1 :3 : 6 proportion by volume using 40 mm down clean, hard, graded aggregates and providing 350 mm thick 300 mm high protective wall of UCR masonry in CM 1 : 5 proportion by volume alround BM stone, including cost of all materials, labour, dressing top surface of stone and engraving BM data on top surface, excavation of pit, batching and mixing concrete and mortar, placing concrete around stone and compacting, packing mortar and wedging stone chips into masonry joints, finishing, curing etc., complete with all lead and all lifts.	**each**	**9419.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
	MAINTENANCE WORKS :		
WRD: 7.10.	**Removing** dry stone **rock- toe / rivetment** and **filter** layers below rock-toe / rivetment including stacking all materials separately as directed with all lead and all lifts.	**m^3**	**274.00**
WRD: 7.11.	**Re-constructing** 600 mm thick hand packed **rough stone revetment** with through stones at 1.50 m c/c over a backing of 450 mm thick graded filter media consisting of sand, 10 mm and 40 mm down graded aggregates satisfying specified filter criteria laid in layers of 150 mm thick each using sand from approved quarry and stones and filter aggregates obtained from revetment removed for re-construction including cost of sand, labour, laying filter and stones to specified slopes, wedging with stone chips, finishing surface etc., complete with all lead **and all lifts.**	**m^2**	**481.00**
WRD: 7.12.	**Re-constructing** dry rubble **rock-toe** including **filter media** below / behind rock-toe consisting of sand 20 mm and 80 mm down graded aggregates satisfying specified filter criteria laid in layers of 150 mm thick each using sand from approved quarry and stones and filter aggregates obtained from rock-toe removed for re-construction including cost of sand, labour, laying filter and stones to specified slopes, wedging with stone chips, finishing surface etc., complete with all lead **and all lifts.**	**m^3**	**480.00**
WRD: 7.13.	**Removing** and **resetting** disturbed Yarguntla /Shahabad /Talikot /PCC / other types of **slab lining in CM 1 : 3** proportion by volume with **flush pointing in CM 1 : 3** proportion by volume including cost of all materials, 'labour, batching and mixing mortar, finishing, curing etc., complete with **all lead and all lifts.**	**m^2**	**80.00**
WRD: 7.14.	**Removing** and **resetting** disturbed **dry rubble / size stone pitching** 250 to 450 mm thick including packing and wedging with stone chips, finishing surface etc., complete with **all leads and lifts.**	**m^2**	**73.00**
WRD: 7.15.	**Removing** and **refixing** disturbed **chainage/demarcation/hectometre / guard stones** including excavation, back filling after re-fixing stone etc. complete with **all leads and lifts.**	**each**	**93.00**
WRD: 7.16.	Removing and **refixing** disturbed **km stone /sign board / hecto-metre stone** etc., including excavation, back filling with available stuff after refixing, forming base platform of size 900 x 900 x 75 mm including watering, ramming etc complete with **all leads and lifts.**	**each**	**211.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 7.17.	Providing **hearting embankment for breached / damaged portion** of canal using **selected approved impervious soil** from **borrow areas** in layers of 100 to 150 mm (before compaction) including cost of all materials, machinery, labour, all operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, sectioning sides / edges, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller or pneumatic / vibrating plate compactors etc., complete with all **lead and all lifts.**	**m^3**	**500.00**
WRD: 7.18.	Providing **casing embankment for breached / damaged portion** of canal using **approved pervious /semi-pervious soil** from **borrow areas** in layers of 100 to 150 mm (before compaction) including cost of all materials, machinery, labour, all operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, sectioning sides / edges, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller or pneumatic / vibrating plate compactors etc., complete with all **lead and lifts.**	**m^3**	**521.00**
WRD: 7.19	Providing **hearting embankment for breached / damaged portion** of canal using **selected impervious soil** from approved **dump areas** in layers of 100 to 150 mm (before compaction) including cost of all materials, machinery, labour, all operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, sectioning sides / edges, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller or pneumatic / vibrating plate compactors etc., complete with all **lead and lifts.**	**m^3**	**247.00**
WRD: 7.20	Providing **casing embankment for breached / damaged portion** of canal using **pervious / semi-pervious soil** from approved **dump areas** in layers of 100 to 150 mm (before compaction) including cost of all materials, machinery, labour, all operations such as collection of soil, spreading soil in layer of specified thickness, sorting out, breaking clods, sectioning sides / edges, watering, compacting each layer to **density control of not less than 95 percent** or as stipulated using power roller or pneumatic / vibrating plate compactors etc., complete with all **lead upto and lifts.**	**m^3**	**258.00**
WRD: 7.21.	**Repairing rain cuts** / resectioning canal slopes to required lines and grades as directed using available canal side soil including dressing, packing soil, breaking clods, watering, tamping etc., complete with **all leads and lifts.**	**m^2**	**5.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 7.22.	**Cleaning drainage gallery, adits, instrumentation galleries** etc., by scrubbing / brushing including chiselling and removing leached lime deposit and disposing off all the waste material out side adits in specified location as directed etc., complete with **all leads and lifts.**	**m**	**53.00**
WRD: 7.23.	**Cleaning dam parapet** inner face and top using oxalic acid and water by scrubbing / brushing and washing to remove all surface coatings etc., complete .	**m**	**44.00**
WRD: 7.24.	**Cleaning gates / hoists / embedded parts** for re-painting by removing rust, old paint, grease etc., **by using wire brush**, scrubber, rust remover including cost of all materials, labour, machinery, scaffolding, applying a coat of rust inhibitive compound etc., complete.	**m^2**	**79.00**
WRD: 7.25.	**Cleaning gates / hoists / embedded parts** to expose fresh metal surface for repainting **by sand blasting** method as per specifications including cost of all materials, labour, machinery, scaffolding, applying a coat of rust inhibitive compound etc., complete with all **lead and all lifts.**	**m^2**	**774.00**
WRD: 7.26.	Excavation and **removal of silt** and silt mixed with sand from canal bed **in dry condition** including disposing off the same in spoil bank or on the canal embankment in layers as directed etc., complete with all **lead and all lifts.**	**m^3**	**218.00**
WRD: 7.27.	Excavation and **removal of silt** and silt mixed with sand **in slussy condition** from canal bed including disposing off the same in spoil bank or on the canal embankment in layers as directed etc., complete with **all lead and all lifts.**	**m^3**	**273.00**
WRD: 7.28.1.	**Removing and hauling** all kinds of **soil / soft rock** including boulders upto 0.6 m diameter **slipped due to natural causes** and disposing off the same in specified dump area or as directed including cost of all materials, labour, forming steps / rampways and all other ancillary operations etc., complete with all lead and lift upto 1.5 m.	**m^3**	**189.00**
Note:	1. The rate under this item is for unit quantity of soil / soft rock in slipped condition. 2. The rate under this item shall be adopted where the material can be disposed off nearby lead or where the slipped zone is inaccessible for disposal of material by mechanical mode. 3. The wieghted average rate applicable to entire quantity based on rates provided under items (7.28.1) and (7.29.1) may be considered where the slipped material consists of mixture of soil / soft rock and hard rock.		

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 7.28.2.	**Removing and hauling** all kinds of **soil / soft rock** including boulders upto 0.6 m diameter **slipped due to natural causes** and disposing off the same in specified dump area or as directed including cost of all materials, machinery, labour, rampways and all other ancillary operations etc., complete with all lead and all lifts.	m^3	**94.00**
Note:	1. The rate under this item is for unit quantity of soil / soft rock in slipped condition. 2. The wieghted average rate applicable to entire quantity based on rates provided under items (7.28.2) and (7.29.2) may be considered where the slipped material consists of mixture of soil / soft rock and hard rock.		
WRD: 7.29.1.	**Removing and hauling hard rock** of all toughness including boulders above 0.6 m diameter **slipped due to natural geological causes** including breaking large fragments by blasting if necessary and disposing off the same in specified dump area or as directed including cost of all materials, labour, forming steps / rampways and all other ancillary operations etc., complete with all lead and lift upto 1.5 m.	m^3	**320.00**
Note:	1. The rate under this item is for unit quantity of soil / soft rock in slipped condition. 2. The rate under this item shall be adopted where the material can be disposed off nearby lead or where the slipped zone is inaccessible for disposal of material by mechanical mode. 3. The wieghted average rate applicable to entire quantity based on rates provided under items (7.28.1) and (7.29.1) may be considered where the slipped material consists of mixture of soil / soft rock and hard rock.		
WRD: 7.29.2.	**Removing and hauling hard rock** of all toughness including boulders above 0.6 m diameter **slipped due to natural geological causes** including breaking large fragments by blasting if necessary and disposing off the same in specified dump area or as directed including cost of all materials, machinery, labour, rampways and all other ancillary operations etc., complete with all lead and all lifts.	m^3	**231.00**
Note:	1. The rate under this item is for unit quantity of soil / soft rock in slipped condition. 2. The wieghted average rate applicable to entire quantity based on rates provided under items (7.28.2) and (7.29.2) may be considered where the slipped material consists of mixture of soil / soft rock and hard rock.		
WRD: 7.30.	**Cleaning concrete / masonry / rock surface** for guniting / shotcreting by sand blasting method and cleaning by air and water jets after sand blasting as per specifications including cost of all materials, machinery, labour, scaffolding etc., complete with all **lead and all lifts.**	m^2	**672.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 7.31.	**Drilling 25 mm / 32 mm** dia. **Holes** vertical or inclined in **concrete / masonry / rock** by percussion drilling method using jack hammer as directed to specified depth including cost of all materials, machinery, labour, cleaning holes etc., complete.	**m**	**276.00**
WRD: 7.32.	Supplying and fixing **bulb type uncladded rubber seals and hot dipped G.I bolts / nuts / washers** of approved quality including cost of all materials, labour, removing existing worn out / damaged bulb type rubber seals from gates, cleaning surface, making holes in new seals, fixing new seals / bolts / nuts / washers tightly in position, scaffolding etc., complete with **all leads and all lifts.**	**m**	**1237.00**
WRD: 7.33.	Supplying and fixing **bulb type teflon uncladded rubber seals and hot dipped G.I bolts / nuts / washers** of approved quality including cost of all materials, labour, removing existing worn out / damaged bulb type rubber seals from gates, cleaning surface, making holes in new seals, fixing new seals / bolts / nuts / washers tightly in position, scaffolding etc., complete with **all leads and all lifts.**	**m**	**2016.00**
WRD: 7.34.	Supplying and fixing **flat rubber seals and hot dipped G.I bolts / nuts / washers** of approved quality including cost of all materials, labour, removing existing worn out / damaged flat type rubber seals from gates cleaning surface, making holes in new seals, fixing new seals / bolts / nuts / washers tightly in position, scaffolding etc., complete with **all leads and all lifts.**	**m**	**1169.00**
WRD: 7.35.	Supplying and fixing **Z- type rubber seals and hot dipped G.I bolts / nuts / washers** of approved quality including cost of all materials, labour, removing existing worn out / damaged Z- type rubber seals from gates cleaning surface, making holes in new seals, fixing new seals / bolts / nuts / washers tightly in position, scaffolding etc., complete with **all leads and all lifts.**	**m**	**1444.00**
WRD: 7.36.	**Providing** and **fixing** 100 x 50 mm 10 gauge non-galvanized **weld mess to concrete / masonry** surface including cost of all materials, machinery, labour, fixing weld mesh to exposed reinforcement bars or by driving rafter nails, scaffolding etc., complete with **all leads and lifts**.	**m^2**	**338.00**
WRD: 7.37.	**Removing PCC /Shahbad slabs** from the side lining of canal carefully and stacking the same on road side / canal bed as directed with **all lead and all lifts.**	**m^2**	**55.00**

Item No.	Brief description of work	Unit	Basic Rate in `:
1	2	3	4
WRD: 7.38.	**Providing and filling / replacing gear oil** of approved quality upto the required gauge level **for Radicon Gear unit of hoists / gantry cranes** including cost of all materials, machinery, labour etc., complete., with **all leads and lifts.**	**L**	**292.00**
WRD: 7.39.	**Providing and applying grease** of approved quality to **gate and hoist components** requiring greasing as part of the annual maintenance using grease gun wherever necessary including cost of all materials,machinery, labour, scaffolding etc., complete with **all leads and lifts.**	**kg**	**326.00**
WRD: 7.40.	**Providing and applying cardium compound** of approved quality to **wire ropes of hoists / gantry cranes** as part of the annual maintenance including cost of all materials, machinery, labour etc., complete with **all leads and lifts.**	**kg**	**170.00**

Narayanpura Dam

Almatti Dam

Hidkal Dam

Construction of KINDI Dam
at Belthangadi Taluk, Southcanara District

Arakanakere