

SPECIAL CONDITIONS FOR P. WAY WORKS

A. GENERAL

- 1 All the track works must be carried out as per instructions given in "Indian Railway Permanent Way Manual (IRPWM) – 2024 with all CS up to date of inviting of tender.
- 2 CE's circular No. 255 (Revised) will be followed, which primarily states:-
 - (a) No track work should be carried out by the contractor without the presence and supervision of a railway official (not below the rank of Permanent Way Supervisor) authorised by an officer of the Engineering department not below the rank of Assistant Engineer.
 - (b) The competent P. Way inspector/Supervisor before the commencement of each day's work shall issue the permit to work memo (as per standard format) to the contractor or his representative with due acknowledgement (on obtaining the traffic block if necessary in consultation with traffic controllers).

This 'Permit To Work' memo shall be valid only for the date of issue, and shall be returned back by the contractor/contractor's representative to the P.Way inspector / supervisor on completion of the day's work.
- 3 All P. Way tools and plants required for the work will have to be arranged by the contractor and these should be of approved type only. No P. Way tools will be supplied by Railway. However, dip lorries may be arranged by the Railway free of cost as and when required in connection with the work. The dip lorries will remain in the custody of the Railway's representative at site and should not be put on track in absence of Railway's supervision (not below the rank of PWM). Maintenance of dip lorries including replacement of bearing and rectification of any other damage during execution of work - will have to be done by the contractor at his own cost as per direction of Engineer-in-charge. Failing which necessary cost of repair will be recovered from contractor's bill/dues.
- 4 For works requiring traffic blocks, necessary traffic block will be made available as far as possible. However, if traffic block is not being permitted on any of the day, the contractor will not have any claim for the idling of his/their men and materials. The rate quoted should cover all such contingencies.
- 5 For work which are to be carried out under traffic conditions, it will be the responsibility of the contractor to see that there is no detention and or interruption to the movement of trains. No claims will be admissible towards loss of time, wastage of labour employed etc. which may be incurred by the contractor due to movement of trains. The rate quoted should cover all such contingencies.
- 6 Whenever renewal of sleepers with PSC sleepers is done by the contractor under relevant items of SOR, greasing of legs of all pandrol clips and eyes of inserts of concrete sleepers must be done with Railway's grease conforming to IS-408 before fixing as per Para 1411 (5) (b) of IRPWM. The GR pads should be fixed at the rail seat of concrete sleepers with approved quality contractor's adhesive. No extra payment will be made to the contractor for the said works.
- 7 Release materials shall be deposited by the contractor at nearest SE/P-Way store or nominated location for which cost of transport shall be paid by Rlys under relevant schedule except for free lead provisions wherever mention in schedule.
- 8 Contractor should take all precaution for safety of his/their labour against running traffic. Railway shall not entertain any claims towards any accident whatsoever of the labour engaged by the contractor.
- 9 In case of any accident, the contractor shall be liable to pay for the damages to the extent, he is responsible on the basis of the report of enquiry committee accepted by competent authority of Railways.
- 10 The entire work will be executed under the supervision of Rly.'s Engineer-in-charge or his authorised representative at site.

B. FOR WELDING WORKS

- 1 The welding portions and other consumables shall be issued to the contractor from the store godown of concerned Section Engineer/P. Way. Contractor should make his own arrangement for transporting of those materials to the site in intact condition. Any loss/damage etc. in the transit shall be the responsibility of the contractor. The contractor should note that the welding portions are sensitive to moisture and may become non functional due to ingress of moisture etc. Contractor shall therefore, take adequate safeguard / measures against any ingress of moisture in welding portion during transit as well as during storage at site. If any portion, consumables become unusable due to moisture etc., Railway will recover the cost of affected materials as per extant rules.
- 2 For insitu AT welds, the contractor must ensure that the thermit joints are finished by rail profile grinder on the same day of welding. In case the contractor fails to comply this, the railway may take up the work departmentally and recover the cost of work including other liquidated damage from contractor's bill.
- 3 Contractor has to provide skilled as well as un-skilled staff and consumables for conducting postweld - treatment as per the specifications of the manufacturer.
- 4 All the A.T. Welded joints which are made by the contractor against this contract should be painted with contractor's high build epoxy paint (2 packs) conforming to RDSO specification No. M&C /PCN-III/2000 on the welded area upto 10 cm on either side. Before that the dust and dirt and flaked paint are to be removed from the welded joints by wire brushing. The surface is to be degreased before painting by petroleum hydrocarbon or any other suitable solvents if oil or grease is present. The welded area is to be scrubbed with water to make it free from slag and other water soluble compounds before painting.
No extra payment will be made to the contractor for execution of said item. The detailed specifications and procedures of painting should be as per Railway's A.T. welding manual.
Payment for supply of labor for welding will be done only after painting of these joints as detailed above.

C. Painting of in-service rails (with anti corrosive bitumen black paint as per IS:9862 with grease around the liner.)

1 SURFACE PREPARATION:

- 1.1 The surface preparation of rails is one of the most important pre-requisite for the painting to serve the purpose. Surface preparation shall not be done unless the approved paints in sufficient quantities are available in stock at site. Sufficient care should be taken in preparing the surface and is, therefore, required to be done under proper supervision. The surface shall be made free from oil, grease and dust. The surface shall be rubbed with wire brush and sand paper etc. The tools used may be hand or power operated such as scrappers, wire brushes, sand paper, pumice stones, etc. Wire brushing should invariably be done at the end so as to obtain a uniform rubbed surface. The surface prepared may be checked by visual observation for uniformity of surface.
- 1.2 Special care should be taken in preparing the surface at the weld collars, liner contact areas. Generally weld collars and liner contact areas are considered most corrosive areas.
- 2 Surface preparation/painting shall not be done in the following conditions.
 - i) When the ambient temperature is below 10° centigrade or above 50° centigrade.
 - ii) In rainy season.
 - iii) During night.
 - iv) In winter before 8.00 A.M.
 - v) In summer between 11.00 A.M. and 3.00 P.M. on areas that are likely to be exposed to direct sun light.
 - vi) Extremely windy/misty/dust blowing conditions.

- vii) Chemicals should not be used for surface preparation.

3 PAINTING SCHEME:

- i) 1st Coat: Anti corrosive bituminous black paint confirming to IS:9862-1981 to a thickness of 100 microns.
- ii) 2nd Coat: Anti corrosive bituminous black paint confirming to IS:9862-1981 to a thickness of 100 microns.

4 METHOD OF PAINTING:

- i) A speed restriction of 30 Kmph shall be imposed in a selected stretch and only alternate ERCs are removed either inside of the gauge face or outside of the gauge face. This work should be planned only when rail temperature is likely to be within the range "td - 20° C to" td + 10° C.
- ii) At no point of time both inside and outside ERCs even on alternate sleepers should be removed.
- iii) The work shall be started at around 8.00 hrs. and ERCs shall be removed at alternate sleepers and on completion of surface preparation, bituminous black conforming to IS:9862-1981 shall be applied to a thickness of 100 microns and allowed to dry for 8 hours.

Subsequently the second coat shall be applied to a thickness of 100 microns and allowed to dry for 8 hours. After that, the liner and ERCs are fixed to the rails. All the liners shall also be painted with anti-corrosive black after duly cleaning the surface.

- iv) Similarly, in the same caution order, alternative left over ERCs are removed and painting done as indicated above.

5 TREATMENT OF RAIL SURFACE NEAR LINER:

Greasing of ERC shall include application of Rlys grease on the under side of liners as also the corresponding area of the rail foot. To avoid ingress of toilet droppings as well as moisture to the surface of liner and rail foot, grease shall also be applied along the boundary of liner so as to seal the liner boundary.