

Part A- BOQ for OPGC I -Track.

AMC for maintenance of P-Way / Track, Bridge & Other Civil Miscellaneous works of MGR from ITPS to Gidhaghara Station for a Period of 02 (Two) Years"

Sl. No.	Description of work	UOM	Qty. for OPGC I Track 1st year	Unit Rate for 1st year	Total Amount for 1st Year	Qty. for OPGC I Track 2nd year	Unit Rate for 2nd year	Total Amount for 2nd Year
	Total length in ETKM = 13.3							
1	Through packing of Broad Gauge Railway straight/curved track of any sleeper with stone ballast to maintain correct alignment, cross and longitudinal level as required for maintaining track gauge, versine, super elevation etc on both straight and curve track with contractor tools and labors inclusive of all charges as per IRPWM and as directed by EIC on our MGR track line including hopper, loading yard & unloading yard.	M	13300			13300		
2	Slack packing of track as and when required with contractor tools and labors inclusive of all charges as per IRPWM manual.	M	9975			9975		
3	KEY MAN : Daily examination of complete track and tightening their fittings by deploying of key man for daily patrolling with mobile phone and checking the track for 8 hours for length of 3 to 5 KM by each key man with tools and tackles. The patrolling shall be 8 AM to 5 PM. The key man shall carry out job for tightening of ERCs, liners, rail screws, plate screws, points & crossings fittings, guard rail fittings, trap switch fittings. The patrolling shall be as per instruction of EIC for working period.	Manday	720			720		
4	Ballast profiling, boxing and dressing with special attention at curves etc. as per IRPWM manual.	M	2000			2000		
5	Maintenance of points and crossing and minor rectification like alignment and lubrication, proper crossing gauge on the check rail and its adjustment for clearance to the correct profile with through packing as per requirement.as per IRPWM manual.	No	64			64		
6	Retired PWI inspection for P-way points & crossing / fish plates/ clips/ track alignment rain cuts, holes and complete track defects if any etc by OPGC push trolley or motorized trolley with agency gang man/trolley man. Weekly thrice or as per instruction of EIC based on work requirement. The PWI should maintain inspection and "Daily Material Transaction Register" for submission at the end of month to EIC. The agency / contractors PWI will prepare and maintain a "Section Register" to record important details of the track/section.	No	80			80		
7	Painting of check Rail both ends with white paints of approved brand up to a length of 200 mm in the rail. Material and brushes are to be supplied by OPGC.as per IRPWM manual.	M	640			640		
8	Jim crewing of KINKY Rail and Tongue Rail. Remedial measures are to be done during buckling of track. as per IRPWM manual.	No	5			5		
9	Realignment of curve/readjustment of vertical curve as and when required involving slewing of track with desired versine followed by one KATCHA packing/through packing as per requirement.	M	1000			1000		
10	Maintenance of meter / Km / Curve / signal post lying along the MGR track (Post / Indicator & paints shall be supplied by the OPGC). Calculation and marking of Station No., Super elevation, chainage and versine etc. Marking of Kilometer post (chainage), creep indicator post, points and crossing in stations, number of curves, super elevation of curves, transition length posts (TPTC, TPCC), degree of curvature post, versine of curve, HFL of bridges, danger level of bridges etc.	M	13000			13000		
11	Removing weeds & bushes in ballast section and cess up to 3.5m from center line of track in section & station yard, as specified by Engineer In-Charge including disposal of branches, bushes outside cess/yard.	M	4000			4000		
12	Minor Cess repair including cess cutting, filling, and repair of minor rain cuts on embankment as and when required.	CUM	500			500		
13	Maintenance of manned and unmanned level crossings with proper lubrication etc, as per IRPWM manual. Material are to be supplied by OPGC.	No	2			2		
14	ERC re-greasing as per IRPWM manual. Material & Grease to be supplied by OPGC.	No	40000			40000		

15	Emergency maintenance & repair of track at any section during dislocation due to derailment of loco/wagon. All material shall be supplied to you by OPGC. The cutting and welding staff for repair shall be arranged by the agency. OPGC shall provide material for that work along with gases etc. Repair of rail for minor crack due to accident and derailment shall be done by the agency(Engagement gang man)	Manday	50			50		
16	Emergency maintenance & repair of track at any section during dislocation due to derailment of loco/wagon. All material shall be supplied to you by OPGC. The cutting and welding staff for repair shall be arranged by the agency. OPGC shall provide material for that work along with gases etc. Repair of rail for minor crack due to accident and derailment shall be done by the agency ,(Engagement supervisor)	Manday	25			25		
17	Supervision of emergency maintenance & repair of track at any section during dislocation due to derailment of loco/wagon by engaging PWI. All material shall be supplied to you by OPGC. OPGC shall provide material for that work along with gases etc.	Manday	5			5		
18	Greasing of face of outer Rail in the curve as per instruction of EIC. Grease shall be supplied by OPGC as per IRPWM manual.	M	1000			1000		
19	Side drain, Catch water drain and Cross drain cleaning work on any place of track for preventing the damage of track.	M	2000			2000		
20	Gang patrolling shall be done during abnormal rainfall. Pre-monsoon precautionary measures comprising clearing of vent ways shall be done by Engagement of manpower (Gang man).	Manday	20			20		
21	Gang patrolling shall be done during abnormal rainfall. Pre-monsoon precautionary measures comprising clearing of vent ways shall be done by Engaging Supervisor	Manday	20			20		
22	Maintenance of gauge level, elevation, joints etc on the track circuited area (with modification if required) or at the concrete platform located near the In-motion Weighbridge at the approach and beyond the Track hopper of Coal Handling Plant at ITPS and at Chharlla.	M	100			100		
23	Renewal of worn out / broken 1 in 8 1/2 crossing only with fitting & fastening including lead up to 30 mtr but excluding sleepers.	No	2			2		
24	Lifting of track up to 25 mm to 75 mm. Each lift not more than 25 mm	M	500			500		
25	Interchanging of rail when rail wear is out of limit for rake movement on casual requirement	M	50			50		
26	Installation of PSC sleepers as per IRPWM manual.	No	10			10		
27	Renewal of worn out / broken in 1 in 8 1/2 straight /curved switches of Rail with Fitting & Fastening including lead up to 30 mtr. But, excluding sleepers.	No	2			2		
28	Renewal of tongue rail left / right of 1 8 1/2 (straight and curved switch) with complete fitting and fastening including lead up to 30 mtr but excluding sleeper.	No	2			2		
29	Transportation of P-way (rail, ballast, sleeper etc) and S&T heavy material from OPGC store/any site of OPGC to any other location of our MGR system by contractors own vehicle 407, small truck of six wheeler & tractor etc, including loading and unloading. Lead from 0 mtr to 5 Kilo meter.	Per Trip	10			10		
30	Transportation of P way (rail, ballast, sleeper etc) and S&T heavy material from OPGC store/any site of OPGC to any other location of our MGR system by contractors own vehicle 407, small truck of six wheeler & tractor etc including loading and unloading Lead from 5 Kilo meter to 20 Kilo meter	Per Trip	10			10		
31	Transportation of P way & S&T material (rail, ballast, sleeper etc)from store/any site of OPGC to any other location of our MGR system by OPGC dip lorry / material trolley including loading and unloading. a) Lead Up to 1 KM	MT	10			10		
32	Transportation of P way & S&T material (rail, ballast, sleeper etc)from store/any site of OPGC to any other location of our MGR system by OPGC dip lorry / material trolley including loading and unloading. a) Lead Up to 1 KM b) Extra lead for each subsequent lead 0.5 Kilo meter / MT (Metric ton)	MT	20			20		
33	Pulling back creep in ordinary track(for single rail) for Rail/short weld Rails of 39 mtrs and re-fixing anchors & all other fittings including slack packing and Squaring of displaced sleepers(Average creep 30 cm in two sides i.e 15 cm on each side rail in the running track.	M	5000			5000		

34	Renewal of Rails of any section with fitting and fastening including stacking within 30 mtrs, in connection with Rail fracture or damage (removal of existing rail and placing new rail.)	M	130			130		
35	Lubrication of fish plated joints, bolts and nuts as per IRPW manual (consumables like grease etc to be supplied by OPGC)	NO	508			508		
36	Replacement/renewal of missing fittings and fasteners (nut, bolt and ERC of the track	Each	400			400		
37	Replacement of GR sole plate of track.	Each	10164			10164		
38	Replacement of GFN / Metal liner /ERC.	Each	2000			2000		
39	Maintenance of OPGC dip lorry , checking of all the parts of the lorry for mechanical parts, proper lubrication and minor repair. OPGC shall provide spares for the work.	No	4			4		
40	Maintenance of OPGC Motorized trolley, checking of all the parts of the trolley for electrical parts, mechanical parts and proper lubrication. OPGC shall provide spares for the work.	No	4			4		
41	Overhauling of level crossing with proper lubrication and as per IRPWM manual	No	2			2		
42	Drilling of Rail of 60 kg by agency hand tools	No	10			10		
43	Shallow screening of track ballast in crib portion.	M	500			500		
44	Rail track welding with supply of raw material for welding for fracture in rail track	No	5			5		
45	Conveying from stacks and spreading of stone ballast within a lead of 100m and lift up to 4.5 M.	cum	500			500		
46	Supply of coarse sand and filling in track as per instruction of EIC	cum	100			100		
47	Cutting of Rail of 60 kg by agency hand tools	No	10			10		
48	Supply of Crusher dust in track as per direction of EIC	Cum	100			100		
49	Carrying out the USFD testing of rails by SRT by using 0 degree / 4 Mhz , 37 degree / 2 Mhz and 70 degree / 2 MHz probes by NBC method as per IR standard. Specification for ultrasonic testing of rail welds as applicable to rails testing complete as directed by EIC. The testing shall cover minimum 94 % of the Railhead cross sectional area , 100 % of the web cross sectional area and 100 % of bottom flange of rail falling below web. (This shall cover the Gauge face corner defects also).The rate for testing includes cost of contractor ,labor , operator, USFD machine, Tools and plants i.e probes , couplant, etc.and all other incidentals charges related to testing work including taxes, transportation etc. The item also includes the detection marking of the defects detected as per standard Railway and RDSO practices including submission of daily reports complete.as per latest amendment of RDSO	RMT	26000			26000		
50	Carrying out the USFD testing of welds (thermic and flash butt welding) , by using 0 degree and 70 degree probes for head testing ,70 degree (2 Mhz) , 20 mm x20mm single crystal probe for flange testing and 45 degree (2 Mhz) / 70 (2 Mhz , 8 mm x 8 mm) probe for testing as applicable as per Indian railway standard specification for ultrasonic testing of rail / weld as applicable to weld testing complete as directed by EIC . The testing shall cover 100 % flange X sectional area, 100 % web X sectional area and 94 % of weld head X sectional areas. The rate for testing includes cost of contractor, labor, operator USFD machine , tools and plants i.e probes , couplants ,etc and all other incidental charges related to testing work including taxes ,transportation etc. The item also include the detection , marking of the defects detected as railway standard RDSO and Railway practice including submission of daily report complete.	No	170			170		
51	Providing technical service for epoxy application on track hopper & approach for epoxy application, grouting, leveling of track and fixing MCI inserts.	Manday	100			100		
52	Repairing of track hopper approach (Rake entry side) inserts by fast setting material. The agency is to supply material and service for leveling and tightness of insert.	Cum	1			1		
53	Grouting / anchoring of weighbridge approach with threaded rod and chemical RE 500 (Hilti make) / or other branded product as per EIC with all material by the agency	No	30			30		
54	Supply & stacking of Hard Granite ballast	CUM	500			500		
55	Deep screening of track ballast as per IRPWM manual.	M	1000			1000		

56	Renewal of concrete sleepers by concrete sleepers (Replacement of any type of sleepers in track with PSC sleepers lying on cess or at Bridge Approaches for casual renewal at isolated locations with all fittings, Complete to specified gauge & cross level with contractor's tools including packing and dressing of ballast as directed by Engineer-In-Charge. Released materials shall be neatly stacked and handed over at specified location or near either side of Bridge approaches as directed or as per IRPWM manual.	No	50			50		
57	Engagement of welder for welding work at track.	No	10			10		
58	Lifting the newly inserted BG 60 Kg. / 52 Kg. turnouts/ trap switches to required level to provide a ballast cushion up to 225mm from existing level with Railway's stone ballast in convenient stages including one round of through packing after completion of final stage of lift, levelling, aligning, gauging and boxing etc, with contractor's labor, tools, with all lead and lifts etc, and as directed by the Engineer-In-Charge or as per IRPWM manual.	No	32			32		
59	Supply of oxygen gas for rail repair work.	CUM	150			150		
60	Supply of DA gas for rail repair work.	CUM	50			50		
61	Track hopper maintenance	M	1000			1000		
62	Track lifting from 75 mm - 150 mm as per requirement.	M	1000			1000		
63	Inspection of track by Railway retired ADEN / DEN level officer.	No	2			2		
64	Fixing Joggled Fish Plates with bolt / clamp (supplied by OPGC in running track conditions at welds on rail, as directed by Engineer- In -Charge (drilling of holes in rail, if required, shall be paid separately with 2 bolt or 4 bolt or clamp	Set	500			500		
65	Anti-corrosive painting of rail on running track of any sleeper density on web, foot etc, Including liner contact area (excluding bottom of foot) and fishing plane as per requirement with two coats of thickness of 100 microns each by bituminous black paint confirms to IS-9862 of reputed make including painting of liners, ERCs and including surface preparation, i.e. cleaning with wire brush / sand paper as a complete job as per procedure prescribed in latest edition of IRPWM	M	500			500		
66	Replacing existing glued joint rail with cut rails or with glued joint rail or insertion of glued joint by cutting existing track under traffic condition by cutting rails, re-fixing with all rail sleeper fastenings and providing required gaps for carrying out welding as an alternative to drilling holes or joining rails with fish plates duly drilling holes as required and as directed by Engineer In-Charge.	No	5			5		
Total in (Rs.) PART A (OPGC –I) Track excluding GST								
TOTAL VALUE FOR 02 YEARS FOR PART A (OPGC –I) TRACK EXCLUDING GST								
Part B- BOQ for OPGC II -Track.								
AMC for maintenance of P-Way / Track, Bridge & Other Civil Miscellaneous works of MGR from ITPS to Gidhaghara Station for a Period of 02 (Two) Years								
Sl. No.	Description of work	UOM	Qty. for OPGC II Track 1st year	Unit Rate for 1st year	Total Amount for 1st Year	Qty. for OPGC II Track 2nd year	Unit Rate for 2nd year	Total Amount for 2nd Year
	Total length in ETKM	39.200						
1	Through packing of Broad Gauge Railway straight/curved track of any sleeper with stone ballast to maintain correct alignment, cross and longitudinal level as required for maintaining track gauge, versine, super elevation etc on both straight and curve track with contractors tools and labors inclusive of all charges as per IRPWM and as directed by EIC on our MGR track line including hopper, loading yard & unloading yard.	M	39200			39200		
2	Slack packing of track as and when required with contractor tools and labors inclusive of all charges as per IRPWM manual.	M	29400			29400		

3	KEY MAN : Daily examination of complete track and tightening their fittings by deploying of key man for daily patrolling with mobile phone and checking the track for 8 hours for length of 3 to 5 KM by each key man with tools and tackles. The patrolling shall be 8 AM to 5 PM. The key man shall carry out job for tightening of ERCs, liners, rail screws, plate screws, points & crossings fittings, guard rail fittings, trap switch fittings. The patrolling shall be as per instruction of EIC for working period.	Manday	2160			2160		
4	Ballast profiling, boxing and dressing with special attention at curves etc. as per IRPWM manual.	M	10000			10000		
5	Maintenance of points and crossing and minor rectification like alignment and lubrication, proper crossing gauge on the check rail and its adjustment for clearance to the correct profile with through packing as per requirement.as per IRPWM manual.	No	44			44		
6	Retired PWI inspection for P-way points & crossing / fish plates/ clips/ track alignment rain cuts, holes and complete track defects if any etc by OPGC push trolley or motorized trolley with agency gang man/trolley man. Weekly thrice or as per instruction of EIC based on work requirement. The PWI should maintain inspection and "Daily Material Transaction Register" for submission at the end of month to EIC. The agency / contractors PWI will prepare and maintain a "Section Register" to record important details of the track/section.	No	160			160		
7	Painting of check Rail both ends with white paints of approved brand up to a length of 200 mm in the rail. Material and brushes are to be supplied by OPGC.as per IRPWM manual.	M	440			440		
8	Jim crewing of KINKY Rail and Tongue Rail. Remedial measures are to be done during buckling of track.as per IRPWM manual.	No	10			10		
9	Realignment of curve/readjustment of vertical curve as and when required involving slewing of track with desired versine followed by one KATCHA packing/through packing as per requirement.	M	6000			6000		
10	Maintenance of meter / Km / Curve / signal post lying along the MGR track (Post / Indicator & paints shall be supplied by the OPGC). Calculation and marking of Station No., Super elevation, chainage and versine etc. Marking of Kilometer post (chainage), creep indicator post, points and crossing in stations, number of curves, super elevation of curves, transition length posts (TPTC, TPCC), degree of curvature post, versine of curve, HFL of bridges, danger level of bridges etc.	M	38800			38800		
11	Removing weeds & bushes in ballast section and cess upto 3.5m from center line of track in section & station yard, as specified by Engineer In-Charge including disposal of branches, bushes outside cess/yard.	M	11000			11000		
12	Minor Cess repair including cess cutting, filling, and repair of minor rain cuts on embankment as and when required.	CUM	1000			1000		
13	Maintenance of manned and unmanned level crossings with proper lubrication etc, as per IRPWM manual. Material are to be supplied by OPGC.	No	5			5		
14	ERC re-greasing as per IRPWM manual. Material & Grease to be supplied by OPGC.	No	130000			130000		
15	Emergency maintenance & repair of track at any section during dislocation due to derailment of loco/wagon. All material shall be supplied to you by OPGC. The cutting and welding staff for repair shall be arranged by the agency. OPGC shall provide material for that work along with gases etc. Repair of rail for minor crack due to accident and derailment shall be done by the agency(Engagement gang man)	Manday	150			150		
16	Emergency maintenance & repair of track at any section during dislocation due to derailment of loco/wagon. All material shall be supplied to you by OPGC. The cutting and welding staff for repair shall be arranged by the agency. OPGC shall provide material for that work along with gases etc. Repair of rail for minor crack due to accident and derailment shall be done by the agency ,(Engagement supervisor)	Manday	50			50		
17	Supervision of Emergency maintenance & repair of track at any section during dislocation due to derailment of loco/wagon by engaging PWI. All material shall be supplied to you by OPGC. OPGC shall provide material for that work along with gases etc.	Manday	10			10		
18	Greasing of face of outer Rail in the curve as per instruction of EIC. Grease shall be supplied by OPGC as per IRPWM manual.	M	9000			9000		

19	Side drain, Catch water drain and Cross drain cleaning work on any place of track for preventing the damage of track.	M	8000			8000		
20	Gang patrolling shall be done during abnormal rainfall. Pre-monsoon precautionary measures comprising clearing of vent ways shall be done by Engagement of manpower (Gang man).	Manday	40			40		
21	Gang patrolling shall be done during abnormal rainfall. Pre-monsoon precautionary measures comprising clearing of vent ways shall be done by Engaging Supervisor	Manday	40			40		
22	Maintenance of gauge level, elevation, joints etc on the track circuited area (with modification if required) or at the concrete platform located near the In-motion Weighbridge at the approach and beyond the Track hopper of Coal Handling Plant at ITPS and at Chharlla.	M	400			400		
23	Renewal of worn out / broken 1 in 8 1/2 crossing only with fitting & fastening including lead up to 30 mtr but excluding sleepers.	No	4			4		
24	Lifting of track up to 25 mm to 75 mm. Each lift not more than 25 mm	M	1500			1500		
25	Interchanging of rail when rail wear is out of limit for rake movement on casual requirement	M	100			100		
26	Installation of PSC sleepers as per IRPWM manual.	No	20			20		
27	Renewal of worn out / broken in 1 in 8 1/2 straight /curved switches of Rail with Fitting & Fastening including lead up to 30 mtr. but excluding sleepers.	No	4			4		
28	Renewal of tongue rail left / right of 1 8 1/2 (straight and curved switch) with complete fitting and fastening including lead up to 30 mtr but excluding sleeper.	No	4			4		
29	Transportation of P-way (rail, ballast, sleeper etc) and S&T heavy material from OPGC store/any site of OPGC to any other location of our MGR system by contractors own vehicle 407, small truck of six wheeler & tractor etc, including loading and unloading. Lead from 0 mtr to 5 Kilo meter.	Per Trip	10			10		
30	Transportation of P way (rail, ballast, sleeper etc) and S&T heavy material from OPGC store/any site of OPGC to any other location of our MGR system by contractors own vehicle 407, small truck of six wheeler & tractor etc including loading and unloading Lead from 5 Kilo meter to 20 Kilo meter	Per Trip	10			10		
31	Transportation of P way & S&T material (rail, ballast, sleeper etc) from store/any site of OPGC to any other location of our MGR system by OPGC dip lorry / material trolley including loading and unloading. a) Lead Up to 1 KM	MT	30			30		
32	Transportation of P way & S&T material (rail, ballast, sleeper etc) from store/any site of OPGC to any other location of our MGR system by OPGC dip lorry / material trolley including loading and unloading. a) Lead Up to 1 KM b) Extra lead for each subsequent lead 0.5 Kilo meter / MT (Metric ton)	MT	40			40		
33	Pulling back creep in ordinary track(for single rail) for Rail/short weld Rails of 39 mtrs and re-fixing anchors & all other fittings including slack packing and Squaring of displaced sleepers(Average creep 30 cm in two sides i.e 15 cm on each side rail in the running track.	M	15000			15000		
34	Renewal of Rails of any section with fitting and fastening including stacking within 30 mtrs, in connection with Rail fracture or damage (removal of existing rail and placing new rail.)	M	260			260		
35	Lubrication of fish plated joints, bolts and nuts as per IRPW manual(consumables like grease etc to be supplied by OPGC)	NO	2987			2987		
36	Replacement/renewal of missing fittings and fasteners (nut, bolt and ERC of the track	Each	3000			3000		
37	Replacement of GR sole plate of track.	Each	59752			59752		
38	Replacement of GFN / Metal liner /ERC.	Each	10000			10000		
39	Maintenance of OPGC dip lorry, checking of all the parts of the lorry for mechanical parts, proper lubrication and minor repair. OPGC shall provide spares for the work.	No	8			8		

40	Maintenance of OPGC Motorized trolley, checking of all the parts of the trolley for electrical parts, mechanical parts and proper lubrication. OPGC shall provide spares for the work.	No	8			8		
41	Overhauling of level crossing with proper lubrication and as per IRPWM manual	No	5			5		
42	Drilling of Rail of 60 kg by agency hand tools	No	200			200		
43	Shallow screening of track ballast in crib portion.	M	3000			3000		
44	Inspection of one steel girder bridge span by Railway retired experts	No	12			12		
45	Hiring of JCB for track and miscellaneous work.	Hr	200			200		
46	Rail track welding with supply of raw material for welding for fracture in rail track	No	10			10		
47	Repair of cess including earth work (Earth work in ordinary soil within a lead of 100M, and lift up to 7.5M including rough dressing and breaking clods to maximum 5cm to 7cm and laying in layers not exceeding 0.3m in depth and as per direction of the Engineer-In-Charge	Cum	2000			2000		
48	Conveying from stacks and spreading of stone ballast within a lead of 100m and lift up to 4.5 M.	cum	2000			2000		
49	Supply of coarse sand and filling in track as per instruction of EIC	cum	200			200		
50	Cutting of Rail of 60 kg by agency hand tools	No	20			20		
51	Supply of Crusher dust in track as per direction of EIC	Cum	200			200		
52	Patrolling of track from block station to Block station by foot or OPGC trolley engaging key man and one helper for safety of rake movement in night.	No	720			720		
53	Carrying out the USFD testing of rails by SRT by using 0 degree / 4 Mhz , 37 degree / 2 Mhz and 70 degree / 2 MHz probes by NBC method as per IR standard. Specification for ultrasonic testing of rail welds as applicable to rails testing complete as directed by EIC. The testing shall cover minimum 94 % of the Railhead cross sectional area , 100 % of the web cross sectional area and 100 % of bottom flange of rail falling below web. (This shall cover the Gauge face corner defects also).The rate for testing includes cost of contractor ,labor , operator, USFD machine, Tools and plants i.e probes , couplant, etc .and all other incidentals charges related to testing work including taxes, transportation etc. The item also includes the detection marking of the defects detected as per standard Railway and RDSO practices including submission of daily reports complete.as per latest amendment of RDSO	RMT	77600			77600		
54	Carrying out the USFD testing of welds (thermic and flash butt welding) , by using 0 degree and 70 degree probes for head testing ,70 degree (2 Mhz) , 20 mm x20mm single crystal probe for flange testing and 45 degree (2 Mhz) / 70 (2 Mhz , 8 mm x 8 mm) probe for as applicable as per Indian railway standard specification for ultrasonic testing of rail / weld as applicable to weld testing complete as directed by EIC . The testing shall cover 100 % flange X sectional area, 100 % web X sectional area and 94 % of weld head X sectional areas. The rate for testing includes cost of contractor, labor, operator USFD machine , tools and plants i.e probes , couplants ,etc and all other incidental charges related to testing work including taxes ,transportation etc. The item also include the detection , marking of the defects detected as railway standard RDSO and Railway practice including submission of daily report complete.	No	1421			1421		
55	Engagement of Manpower (Unskilled) for chharlla coal cleaning work.	Manday	3600			3600		
56	Engagement of Manpower(Semiskilled) for chharlla coal cleaning work	Manday	360			360		
57	Providing technical service for epoxy application on track hopper & approach for epoxy application, grouting, leveling of track and fixing MCI inserts.	Manday	100			100		
58	Supply& stacking of Hard Granite ballast	CUM	2000			2000		
59	Supplying of stone boulders weighing not less than 35 kg each at specified bridge locations as per requirement.	Cum	100			100		
60	Deep screening of track ballast as per IRPWM manual.	M	2000			2000		

61	Renewal of concrete sleepers by concrete sleepers (Replacement of any type of sleepers in track with PSC sleepers lying on cess or at Bridge Approaches for casual renewal at isolated locations with all fittings, Complete to specified gauge & cross level with contractor's tools including packing and dressing of ballast as directed by Engineer-In-Charge. Released materials shall be neatly stacked and handed over at specified location or near either side of Bridge approaches as directed or as per IRPWW manual.	No	100			100		
62	Engagement of welder for welding work at track.	No	30			30		
63	Lifting the newly inserted BG 60 Kg. / 52 Kg. turnouts/ trap switches to required level to provide a ballast cushion up to 225mm from existing level with Railway's stone ballast in convenient stages including one round of through packing after completion of final stage of lift, levelling, aligning, gauging and boxing etc, with contractor's labor, tools, with all lead and lifts etc, and as directed by the Engineer-In-Charge or as per IRPWW manual.	No	22			22		
64	Supply of oxygen gas for rail repair work.	CUM	300			300		
65	Supply of DA gas for rail repair work.	CUM	100			100		
66	Track hopper maintenance	M	1000			1000		
67	Track lifting from 75 mm - 150 mm as per requirement.	M	5000			5000		
68	Inspection of track by Railway retired ADEN / DEN level officer.	No	4			4		
69	Supplying and fixing HSFG bolts of any dia and any length with suitable nuts including DTI washers conforming to IRS-B1-2001 for bridges and steel structures with contractors labor, tools and plants and lead and lift etc.	KG	200			200		
70	Metalizing of steel work of girders with sprayed aluminum after surface preparation by Sand/grit blasting, followed by one coat of primer (IS: 5666) & one coat of Zinc Chrome primer (IS:104) and two coats of aluminum paint (IS:2339) with all labor, T&P and material as a complete job duly conforming to all relevant specifications and process given under Clause 39 of IRS-B1-2001 Note: Nominal Thickness of aluminum coating shall be 150 microns. DFT of Zinc chrome primer shall be 25-30 microns and DFT of each coat of aluminum paint shall be 12-14 microns.	SQM	100			100		
71	Providing and fixing railing used in rows for footpath or anti-crash barrier railing with B class G.I. pipe 65/50 mm nominal dia including cost of M.S. angle and channels in vertical posts, welding / bolting, priming painting with one coat ready mix Zinc Chromate conforming to IS: 104 with DFT of 25- 30 Microns, followed by one coat of Zinc Chrome red oxide conforming to IS:2074 with DFT of 25 Microns with all material, labor, T&P as a complete job.	KG	200			200		
72	Supplying and fixing M.S. Angles 65mmx 65mm x 8mm or any other size conforming to IS: 2062 in the nosing of steps of stair cases of Foot Over Bridges including provision of 10mm dia, anchor bar 600mm c/c and fixing with main girder with M.S. flat, making anti-slip arrangements over the top of nosing as per approved scheme given by Engineer-In-Charge with all material, labor, T&P as a complete job.	KG	1000			1000		
73	Providing and fixing various size HTS holding down bolts conforming to IS:1364 in concrete column or in other structures with proper nuts, bolts, washers/plates, grouting of holes with all material, labor, T&P as a complete job.	KG	100			100		
74	Supplying, Fabricating and fixing access ladders, inspection platforms, Trolley refuges etc, on bridges with structural steel conforming to IS: 2062 including welding / bolting, priming painting with one coat of ready mixed paint of Zinc Chromate (IS:104) with DFT of 25-30 microns followed by one coat of Zinc Chrome Red Oxide (IS:2074) with DFT of 25 microns with all material, labor, T&P as a complete job.	MT	1			1		

75	Surface preparation of steel work of bridge plate/composite girders by cleaning with scrappers and/or wire brushes to remove all rust and loose or perished paint to prepare perfectly clean & dry bare metal surface free from all dirt/foreign material & ready for initial coat of paint. Rate includes cost of labor, consumables, brushes, tools & plants, ladders, scaffoldings, jhoola, hanging scaffolding staging etc.	SQM	500			500		
76	Fixing Joggled Fish Plates with bolt / clamp (supplied by OPGC in running track conditions at welds on rail, as directed by Engineer- In -Charge (drilling of holes in rail, if required, shall be paid separately with 2 bolt Or 4 bolt or clamp	Set	600			600		
77	Anti-corrosive painting of rail on running track of any sleeper density on web, foot etc, Including liner contact area (excluding bottom of foot) and fishing plane as per requirement with two coats of thickness of 100 microns each by bituminous black paint confirms to IS-9862 of reputed make including painting of liners, ERCs and including surface preparation, i.e. cleaning with wire brush / sand paper as a complete job as per procedure prescribed in latest edition of IRPWM	M	1000			1000		
78	Replacing existing glued joint rail with cut rails or with glued joint rail or insertion of glued joint by cutting existing track under traffic condition by cutting rails, re-fixing with all rail sleeper fastenings and providing required gaps for carrying out welding as an alternative to drilling holes or joining rails with fish plates duly drilling holes as required and as directed by Engineer In-Charge.	No	10			10		
79	Cleaning and greasing of free end and fixed end of steel girder Bridge bearing with Grease Graphite, Kerosene oil and other materials as per Para 222 of Indian Railway Bridge Manual 1998 with painting of Bearing as per requirement complete as directed by Engineer-In-Charge (Span up to 18.3 mtr)	No	8			8		
80	Cleaning and greasing of free end and fixed end of steel girder Bridge bearing with Grease Graphite, Kerosene oil and other materials as per Para 222 of Indian Railway Bridge Manual 1998 with painting of Bearing as per requirement complete as directed by Engineer-In-Charge (Girder of clear span above 24.40m & up to 30.5m)	No	4			4		
81	Cleaning and greasing of free end and fixed end of steel girder Bridge bearing with Grease Graphite, Kerosene oil and other materials as per Para 222 of Indian Railway Bridge Manual 1998 with painting of Bearing as per requirement complete as directed by Engineer-In-Charge (Girder of clear span above 30.5m)	No	1			1		
Total in (Rs.) PART B (OPGC –II) Track excluding GST								
TOTAL VALUE FOR 02 YEARS FOR PART B (OPGC –II) TRACK EXCLUDING GST								
TOTAL VALUE FOR 02 YEARS FOR (PART A + PART B) TRACK EXCLUDING GST								
GST SHALL BE EXTRA AS APPLICABLE (SAC CODE TO BE INDICATED ALONG WITH APPLICABLE %)								