

CHAPTER - 1 : EARTHWORK			
Item No.	Description of Item	Unit	Rate (Rs.)
	EARTHWORK WITH DEFINED LEAD		
011010	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within railway land, including 50m lead and 1.5m lift, the lead to be measured from the centre of gravity of excavation to centre of gravity of spoil heap: the lift to be measured from natural ground level and paid for in layers of 1.5m each, including incidental work, as per specifications-in		
011011	All kinds of soils	cum	87.81
011012	Ordinary Rock (Not requiring blasting)	cum	207.02
011013	Hard Rock (Requiring blasting)	cum	283.90
011014	Hard Rock (blasting prohibited)	cum	597.65
011020	Extra over 011010 when controlled blasting is required and is carried out with approval of Engineer.	cum	60.12
011030	Extra over items 011010 for spreading and finishing of fill material on embankment by manual means in accordance with specifications	cum	77.78
011040	Extra for manual compaction of earthwork, where permitted, with rammers	cum	7.07
011050	Extra for lead of earth work above initial lead of 50m, in all kind of soils and rocks :		
011051	for every 50 m or part thereof - lead over 50m and upto 150m	cum	10.98
011052	for every 50m or part thereof - lead over 150m and upto 500m	cum	9.40
011060	Extra for Crossing of railway track (each track). Note : This item is payable only where crossing of operational lines is involved	Each Track	10% per track
011070	Extra for every additional lift of 1.5m or part thereof, after the initial 1.5m, for earth work in all soils	cum	8.90
	EARTH WORK IN BUILDINGS		
012010	Extra over item 011010 for excavation in foundations for buildings and bridges to cover dressing to neat dimension and plumbing sides etc. Note : Dressing under this item is payable for the total quantity of excavation in foundation and not partly	cum	9.40
012020	Benching of rock upto average 10 cm depth for foundations. Note : Rate is for benched area measured in plan.	10 Sqm	495.15
012030	Extra for watering and ramming earth in foundation and floors in 15cm layers. Note : This item is payable where ramming is not included in the original rate for earthwork in filling.	cum	16.60

Item No.	Description of Item	Unit	Rate (Rs.)
012040	Filling, watering and ramming earth in 15 cm layers in floors and foundations with surplus earth from foundations including 50m lead and 1.5m lift	cum	20.10
012050	Supplying and filling sand in plinth and under floors including watering, ramming, consolidating and dressing complete	cum	389.08
012060	Preparing and laying puddle on roof etc. including supply of materials and all lead and lift		
012061	With Railway's earth	cum	60.00
012062	With contractor's earth	cum	215.90
012070	Open timbering in trenches for foundations and shafts, wells, cesspits, manholes, underground tanks & the like - including strutting and shoring complete :		
012071	Depth upto 1.5m	Sqm	72.90
012072	Depth exceeding 1.5m but not exceeding 3m	Sqm	74.58
012073	Depth exceeding 3m	Sqm	77.59
012080	Close Timbering in trenches for foundations and shafts, wells, cesspits, manholes, underground tanks & the like, including strutting and shoring complete :		
012081	Depth upto 1.5m	Sqm	144.27
012082	Depth exceeding 1.5m but not exceeding 3m	Sqm	147.05
012083	Depth exceeding 3m	Sqm	153.50
012090	Extra for planking and strutting, if required to be left permanently in position (face area of the timber permanently left to be measured)		
012091	In open timbering	Sqm	563.46
012092	In close timbering	Sqm	1078.39
	Earthwork with indeterminate lead in New lines, Doubling, Projects, etc.		
013110	Earthwork in cutting (Classified) in formation, trolley refuges, side drains, level crossing approaches, platforms, catch water drains, diversion of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, machine and materials and removing & leading all cut spoils either to make spoil dumps beyond 10m. from cutting edge or for filling in embankment with all leads within the section limit, lifts, ascent, descent, loading, unloading, all taxes/royalty, clearance of site and all incidental charges, bailing & pumping out water if required, etc., complete as per directions of the Engineer-in-Charge. The work is to be executed as per Latest / updated edition of "Guidelines for Earthwork in Railway Projects" issued by RDSO, Lucknow. Cut trees shall be property of Railways and to be deposited in the railway godown unless specified otherwise in the Special conditions of contract		

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	Note - (i) All usable earth arising from cut spoils shall be led into bank formation and Unusable spoils shall be dumped / stacked (ii) All hard rock /and boulders not fit for filling will be stacked by the contractor and will be property of the Railways.		
013111	In all conditions and classifications of soil except rock	cum	153.87
013112	Soft rock not requiring blasting in all Conditions	cum	227.08
013113	In hard rock requiring blasting with explosives and blasting/drilling equipment Including all incidental work in all conditions. Rate includes cost of all explosive material	cum	389.79
013114	In rock and very hard rock with hammer / chisel / pavement breaker etc. where blasting is not permitted due to special circumstances and if specifically ordered in writing incl. drilling and all incidental work in all conditions	cum	474.67
013115	In any other type of soil not covered above where classification is not possible	cum	153.87
013120	Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds if provided, platforms etc. with earth excavated from outside railway boundary entirely arranged by the contractor at his own cost as per RDSO's latest guidelines and specifications and special condition of contract including all leads, royalty, lifts, ascents, descents, crossing of nallahs or any other obstructions. The rates shall include all dressing of bank to final profile, demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetations growth, heavy grass, benching of existing slope of old bank, all handling/re-handling. taxes, octroi and royalty etc. as a complete job. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the Special conditions of contract	cum	327.61
013130	Extra for mechanical compaction of earth/blanketing material filled in embankment with contractor's rollers of suitable capacity, type and size to achieve specified density as per specification, testing as per IS codes incl. cost of water, T&P consumable material and all labour as a complete job. The work is to be executed as per Latest edition of "Guidelines for Earthwork in Railway Projects" issued by RDSO, Lucknow	cum	14.14

Item No.	Description of Item	Unit	Rate (Rs.)
013140	Removal of excavated/slip earth/ debris/ malba from the site of works to any other place outside Railway land/premises, including all excavations, handling, re-handling, loading, unloading and leading, etc. all labour and material as a complete job. Removal of Earth (all kinds of soils)/ROCKS, BOULDERS including mud/slush, slipped earth in catch water drains, side drains, over berms in cutting, water way of bridges, over coping of toe/breast/retaining walls etc. including crossing of nallah, railway tracks, making/repairing approach roads if required, all lead, lift, ascent, descents, or any other obstruction. Earth spoils to be dumped outside the cutting or railway embankments as per direction of Engineer in charge	cum	119.87
013150	Laying and spreading blanketing materials (Natural or Mechanically prepared as per GE -1 or G.E.IRS- 2) over new/old embankment/cutting in layers of 30 cm in loose state to make the embankment of designed profile as per specifications. The rate is inclusive of initial site clearance, cutting of shrubs, removal of roots of vegetation growth & heavy grass, surfacing and leveling to give required slope, benching if required on existing bank slope, dressing and finishing of bank, all lead & lift, ascent, descent, crossing of nallahs/ other obstructions, spreading the material and final dressing of slopes and top surface as per specified camber using contractor's own machinery, equipment, T&P labour etc., as a complete job. Note - The rate does not include supply / compaction of blanketing material at site which shall be paid separately.	cum	60.92
013160	Finishing blanketing material, already compacted, in accordance with specification - over embankment including sides/cutting.	100 Sqm	625.01
	MISCELLANEOUS :		
014010	Dressing Surface (average excavation or filling upto 15 cm) including removing vegetation in all kind of soil. Payment against this item is to be made only if it is not included in earth work item	10 sqm	58.90
014020	Daghbhel or lock spit 15 cm deep & minimum width at top 20 cm. Payment against this item is to be made only if it is not included in earth work item.	100 metre	101.20
014030	Felling trees of girth (measured at a height of 1m above ground level) including lead and stacking of material within 100m. Note : 1. When stumps are grubbed up in addition, the rates shall be doubled for trees cut and grubbed. 2. Payment for grubbing shall only be made where specially ordered. 3. Grubbing shall be ordered only where it is essential to remove the stumps, including the roots, as per specification. 4. Grubbing shall include removal of roots of trees and saplings to a depth of 60 cm below ground level - ... Contd. ---		

Item No.	Description of Item	Unit	Rate (Rs.)
	.. Contd. - or 30 cm below formation level or 15 cm below sub grade level, whichever is lower		
014031	Girth over 30 cm and upto 60 cm	Each	103.10
014032	Girth over 60 cm and upto 1.5m	Each	247.60
014033	Girth over 1.5m upto 3 m	Each	560.00
014034	Girth over 3 m	Each	941.10
014040	Benching slopes, cuts 30 cm in height and approximately 60 cm wide	Sqm	6.99
014050	Turfing / planting, including all lead and lift, and watering as required until properly rooted, with. Note - Initially payment of only 40% will be made. Balance 60% will be paid only after 3 months of maintenance period if the turfing is properly rooted.		
014051	Turfing with sods, 10cm thick and 20 cm square closely laid	100 Sqm	5004.87
014052	Turfing with planted doob grass	100 Sqm	5173.88
014053	Planting Sarkanda / sarpat or any other suitable species approved by the engineer	100 Sqm	3868.65
014060	Providing and laying Jute Geo-Textile (JGT) in slopes of Railway embankment in accordance with RDSO's guidelines for application of Jute Geotextile in Railway embankments and hill slopes no. RDSO/2007/GE:G-0008 or its subsequent versions, including incidental earthwork and fixing arrangements		
014061	With GJ - Type 1	100 Sqm	2771.61
014062	With GJ - Type 2	100 Sqm	3381.39
014063	With GJ - Type 3	100 Sqm	4722.93
014070	Cleaning out silt from bed of reservoir/canals including 50m lead and lift upto 1.5 m	10 cum	59.97
014080	Cleaning side drains in cuttings by the side of track (Kutchra or Pucca) including disposal of the debris, soil, muck etc. as directed by the engineer. Note - Rates are for disposal at the end of cutting. Disposal of debris/soil/muck beyond end of cutting to be paid for under relevant lead item.		
014081	lead within cutting is up to 50 m	cum	97.90
014082	lead within cutting is over 50 m and up to 200 m - for every 50 m or part thereof	cum	30.20
014083	lead within cutting exceeds 200 m - for every 100 m or part thereof	cum	30.20
014090	Earth work in embankment from Railway land for repairing of cess/formation/level crossing, rain cuts etc. to make the surface to the desired level and slope to the entire satisfaction of Engineer-in-charge. The rate will include free lead upto 200 M, all lifts, descends, ascends, crossing of track/road/nallah etc. including breaking of clods etc and compaction by rollers/rammers/temping rods etc. Note - This item is only to be paid when specially ordered in writing.	cum	75.96

Item No.	Description of Item	Unit	Rate (Rs.)
014100	Extra rate for quantities of works executed. Note - The extra percentage rate is applicable in respect of each item, but limited to quantities of work executed in these difficult conditions.		
014101	In or under water and/or liquid mud, including pumping out water as required. Note - In or under water means locations/levels where there is continuous ingress of water.	cum	0.20
014102	In or under foul position, including pumping out water as required. Note - Foul position means filthy and unhygienic conditions where physical movements are hampered such as soil mixed with sewage or night-soil.	cum	0.25
014110	Providing and removing barricading with the help of portable fencing along the running track where the work is to be done in close vicinity of the track. Fencing shall consist of self supporting steel angles of size 50 x50x6mm, 1.5m long provided with hooks etc. and embedded in CC 1:2:4 block of size 0.23x0.23x0.23M placed at c/c distance of 2.0 M along the track. 12 mm dia rods in three horizontal layers tack welded with the angle posts including providing Retro-reflective tapes in Horizontal & vertical direction. Note : Released material will be the property of the contractor after the completion of work. Cost of cement to be paid separately.	metre	245.84
014120	Supplying and laying of Biaxial Geo-grid, made from virgin high density polypropylene, having aperture size of 65mm x 65mm and ultimate tensile strength of 30 kN/m with minimum junction efficiency of 95% & minimum radial stiffness of 350 kN/m (@0.5% strain) and laying below ballast over formation, including transportation, contractor's labour, lead and lift complete as per directions of Engineer-in-charge	Sqm	299.97
014130	Supplying and laying of Woven Geotextile made from polypropylene multifilament yarn, having minimum mass of 220 GSM & ultimate tensile strength of 40 kN/m with puncture resistance of 600 N and apparent opening size of 150 microns and laying at interface of sub-grade and blanketing layer, including transportation, contractor's labour, lead and lift complete as per directions of Engineer-in-charge	Sqm	143.30
	New Items To Be Added By Zonal Railways		
015010			
015020			
015030			
015040			
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015060			
015070			