

SCHEDULE - B

NAME OF WORK: CONSTRUCTION OF CENTER OF EXCELLENCE (COE) FOR GREEN HYDROGEN AT GANDHIDHAM

| Sr. no. | Item Description | TOTAL QTY. | Rate | | Unit | | Amount |
|---------|---|------------|---------|----------|---------|------------------|--------|
| | | | In Fig. | In Words | In Fig. | In Words | |
| | PART-C : INTERNAL DEVELOPMENT - ASPHALTING ROAD | | | | | | |
| 1 | Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. | | | | | | |
| (A) | All kinds of soil | 10,429.000 | | | SQM | One Sqaure Meter | |
| 2 | Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, in All kinds of soil, as directed by Engineer-in-Charge. | | | | | | |
| (A) | All kinds of soil | 2,126.000 | | | CUM | One Cubic Meter | |
| 3 | Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge. | 2,879.000 | | | CUM | One Cubic Meter | |
| 4 | Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres. | 3,666.000 | | | CUM | One Cubic Meter | |
| 5 | Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. | | | | | | |
| (A) | With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30 | 917.000 | | | CUM | One Cubic Meter | |
| 6 | Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. | | | | | | |
| (A) | With rapid setting bitumen emulsion On W.B.M / W.M.M. @ 0.4kg/sqm | 917.000 | | | SQM | One Sqaure Meter | |
| 7 | Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. | | | | | | |
| (A) | With rapid setting bitumen emulsion On bituminous surface @ 0.25kg/sqm | 917.000 | | | SQM | One Sqaure Meter | |
| 8 | Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specificaltions and directions of | | | | | | |

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|-----|---|-----------|--|--|-------|------------------|--|
| (A) | 50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100 120 TPH capacity. | 367.000 | | | TONNE | One Metric Tonne | |
| 9 | Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tipper, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge. | | | | | | |
| (A) | 40/50 mm compacted thickness with bitumen of grade PMB-40 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity. | 183.000 | | | TONNE | One Metric Tonne | |
| 10 | Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acrylonitrile) or HIP (High impact polystyrene) or ABS having electronically welded micro- prismatic lens with abrasion resistant coating as approved by Engineer in charge. The glow stud shall support a load of 13635 kg tested in accordance with ASTM D4280. The slope of retro-reflective surface shall be 35 (+/-5) degrees to base .The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4 : 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge. | 204.000 | | | NO | One Number | |
| 11 | Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not be more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by | 264.000 | | | CUM | One Cubic Meter | |
| 12 | Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS the surface of all dirt, scales, oil, grease and foreign material etc. complete. | | | | | | |
| (A) | New work (Two or more coats) | 275.000 | | | SQM | One Square Meter | |
| 13 | Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to | | | | | | |
| (A) | Mandatory/ Regulatory sign boards of 900 mm diameter with support length of 3750 mm | 8.000 | | | NO | One Number | |
| 14 | Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge. | 1,014.000 | | | CUM | One Cubic Meter | |
| 15 | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. | 507.000 | | | CUM | One Cubic Meter | |

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|----|--|-----------|--|--|-----|------------------|--|
| 16 | Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. | 338.000 | | | CUM | One Cubic Meter | |
| 17 | Providing and fixing 80MM THICK perforated Paver block M-40 GRADE -Open grid type with material, transportation, labor with complete all aspect as directed by Engineer in charge | 6,763.000 | | | SQM | One Sqaure Meter | |
| 18 | Providing & laying Selection no. 1 doob grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller make the surface smoothen and light watering the same and maintenance for 30 days or more till the grass establish properly, as per direction of the officer in charge | 6,763.000 | | | SQM | One Sqaure Meter | |
| 19 | Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm,refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately). | 3,600.000 | | | CUM | One Cubic Meter | |
| 20 | Supplying and stacking of good earth at site including royalty and carriage complete (earth measured in stacks will be reduced bv 20% for payment) | 4,800.000 | | | CUM | One Cubic Meter | |
| 21 | Supplying and stacking of well decayed cattle manure at site including royalty and carriage upto 5 k.m.lead complete (Cattle manure measured in stacks will reduced by 8% for Payment). | 1,800.000 | | | CUM | One Cubic Meter | |
| 22 | Providing & laying Selection no. 1 doob grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller make the surface smoothen and light watering the same and maintenance for 30 days or more till the grass establish properly, as per direction of the officer in charge | 2,400.000 | | | SQM | One Sqaure Meter | |
| 23 | Providing and Displaying Euphorbia milli hybrid variety with multi branch, full bloom, with fresh and healthy well developed having 30 to 45 cm ht. in 35 cm Cement Pots as per direction of the officer-in-charge. | 70.000 | | | NO | One Number | |
| 24 | Providing and Displaying Adenium Obesum grafted well developed with fresh & healthy 30 to 60 cm ht. in 25 cm size Earthen Pot/ Plastic Pot as per direction of the officer-in-charge | 70.000 | | | NO | One Number | |
| 25 | Providing and Displaying Bamboo Buddha valley with fresh & healthy 3 to 4 suckers having 75 to 90 cm ht. in 25 cm size Earthen Pot/ Plastic Pot as per direction of the officer-in-charge. | 70.000 | | | NO | One Number | |
| 26 | Providing and Displaying Bird of paradise well developed with fresh & healthy 90 to 120 cm ht in 30 cm Earthen Pot/ Plastic Pot as per direction of the officer-in-charge. | 70.000 | | | NO | One Number | |
| 27 | Providing and Displaying Bougainvillea named variety, Sobhra, Thima, Marry palmar, Cherry Blossom etc. well developed with fresh & healthy bushy in full bloom 75 to 90 cm ht. in 40 cm Cement Pot as per direction of the officer-in-charge. | 70.000 | | | NO | One Number | |
| 28 | Providing and stacking of Bottle palm of ht. 210-240 cm bottom girth 30-35 cm well developed in big HDPE bags. | 120.000 | | | NO | One Number | |
| 29 | Providing and stacking of Ficus benjamina (green) of height 120-135 cm. with 6-8 branches and lush green foliage in gunny bags of size 25 cm as per direction of the officer-in-charge. | 100.000 | | | NO | One Number | |

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| 30 | Providing and stacking of Fishtail palm of ht. 150-180 cm bottom girth 15-20 cm well developed in big poly bags of size 25 cm as per direction of the officer-in-charge. | 120.000 | | | NO | One Number | |
| 31 | Providing and stacking of Lagerstroemia flosreginae of height 150-165 cm.in big poly bag of size 25 cm as per direction of the officer-in-charge. | 60.000 | | | NO | One Number | |
| 32 | Providing and stacking of Magnolia grandiflora of height 150-165 cm. in big poly bag of size 25 cm as per direction of the officer-in-charge | 50.000 | | | NO | One Number | |
| 33 | Providing and stacking of Tectona grandis (Teak) of height 150-165 cm. in big polybags of size 25 cm as per direction of the officer-in-charge. | 60.000 | | | NO | One Number | |
| 34 | Providing and displaying of Areca Palm having ht. 1.20 m to 1.50 m with 5 to 6 suckers, well developed, fresh and healthy with lush green foliage in 25 cm size of Earthen pot/Plastic pot & as per direction of the officer-in-charge. | 40.000 | | | NO | One Number | |
| 35 | Providing and stacking of Dianella variegated, with 3 to 4 variegated leaves in 20 cm size of Earthen Pot / Plastic Pot & as per direction of the officer-in-charge. | 125.000 | | | NO | One Number | |
| 36 | Providing and stacking of Syngonium (Butterfly) variegated with 2-3 suckers healthy foliage in Earthen Pot/Plastic Pot of size 20 cm. as per direction of the officer-in-charge. | 125.000 | | | NO | One Number | |
| 37 | Providing and displaying of Rhaps Palm plant, having ht. 75 cm to 90 cm with 15 to 18 equal suckers, well developed, full of fresh and healthy leaves from bottom to top in 35 cm PVC Pots/C.Pots & as per direction of the officer-in-charge. | 125.000 | | | NO | One Number | |
| 38 | Providing and displaying of Money Plant Broad Leaves mounted on moss stick 1.20 m ht., 5 to 6 plants in each pot, well developed with full of fresh & healthy leaves in size of 25 cm Top dia x 18 cm Bottom dia x 25 cm Perpendicular height Earthen pot/Plastic pot & as per direction of the officer-in-charge. | 125.000 | | | NO | One Number | |

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| 39 | Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unsaverieable material's as per direction of officer in charge (excluding cost of plant & water) Cost of plantation per Shrub (730.60/200) | 400.000 | | | NO | One Number | |
| 40 | Providing & fixing White River (Stone) Pebbles size of 2" to 2.5" dia in natural colour at site of work including loading, unloading, carriage and all taxes paid etc.and as per direction of officer in charge. | 60.000 | | | QTL. | One Quintel | |
| 41 | Edging with bricks laid dry length wise, including required excavation, refilling, consolidating with hand packing and spreading surplus earth neatly within a lead of 50 m : Common burnt clay F.P.S. (non modular) bricks of class designation 7.5 | 320.000 | | | RMT | One Running Meter | |
| 42 | Providing, laying & jointing in position PVC pipe conforming to ISI S : 4985 / 2000 and suitable for the respective 10kg/cm2 working pressures with all fittings and accessories e.g. couplings, tees, bends, reducers, screwed adapters, flanged tail pieces etc. | | | | | | |
| (A) | PVC pipe 75mm-6 kg/cm2 with PVC fittings & Assembly (10Kg) | 750.000 | | | RMT | One Running Meter | |
| (B) | PVC pipe 63mm-6 kg/cm2 PVC fittings & Assembly(10Kg) | 900.000 | | | RMT | One Running Meter | |
| (C) | PVC pipe 50mm-6 kg/cm2PVC fittings & Assembly(10Kg) | 3,300.000 | | | RMT | One Running Meter | |
| (D) | PVC pipe 100mm-6 kg/cm2PVC fittings & Assembly(10Kg) | 40.000 | | | RMT | One Running Meter | |
| 43 | Soft Soil Trenching & Backfilling for Irrigaiton Pipes , minimum trench depth upto 300mm | 4,500.000 | | | RMT | One Running Meter | |
| 44 | Providing & fixing of Stream Type Rotating Sprinkler having 4" Riser Height and upto 9 mtr Radius of Coverage &The Spray Head body shall be constructed of heavy-duty, ultraviolet resistant plastic and stainless steel spring | 300.000 | | | NO. | One Number | |
| 45 | Providing & fixing of Gear Driven Rotor covering 14.0-18.0m Having 4" Riser Height. The Spray Head body shall be constructed of heavy-duty, ultraviolet resistant plastic and stainless steel spring with multifunctional wiper seal with small exposed cover. etc. item complete. | 40.000 | | | NO. | One Number | |
| 46 | Providing & Fixing of , 1/2" Pop up Connecting Four Elbow Swing joint Assembly. The fittings shall be made of UV resistant thermo plastic.etc. item complete. | 300.000 | | | NO. | One Number | |
| 47 | Providing & Fixing of , 1" Pop up Connecting Four Elbow Swing joint Assembly. The fittings shall be made of UV resistant thermo plastic.etc. item complete. | 40.000 | | | NO. | One Number | |
| 48 | Providing and fixing of PVC /HDPE service saddle of varying size.1/2' &3/4" etc. item complete. | 300.000 | | | NO. | One Number | |
| 49 | Supply and fixing of Brown Layred Cylindrical Inline Pressure compensating polytube 16 mm dia , having 4 LPH Emmitting Device with tees, elbows, end caps, GTO etc as required and specified complete. | 4,000.000 | | | RMT | One Running Meter | |
| 50 | Providing & fixing of lateral hoding stakes GI Coated 8" Long Rod | 400.000 | | | NO | One Number | |
| 51 | Providing & fixing of Butterfly Valve 75mm with PP Flanges & GI Nutbolts, Valve body shall be of Engineering plastic PVC Body with Large Plastic Hande | 10.000 | | | NO. | One Number | |

