

**QUALITY CONTROL TEST
REPORTS FORMATS**

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KARNATAKA RURAL INFRASTRUCTURE DEVELOPMENT LIMITED
(FORMERLY KARNATAKA LAND ARMY CORPORATION LIMITED)
"GRAMEENABHIVRUDDHI BHAVAN", 4th & 5th FLOOR, ANANDA RAO
CIRCLE, BANGALORE – 560 009

FORMAT - A

CHECK LIST FOR QUALITY CONTROL REPORT AT PROJECT
[BUILDING WORKS]

PROJECT: Sub Division:..... Division:..... Zone:.....

Name of the work:

Work Code:

Date of Start:

Adm approval No. & Date:

Fund Released:

Tech.Sanction No. & Date:

P.D.C:

Stage of Work	Item of Work	Suitability Tests Conducted (Y/N)	Report/Remarks	Refer Table Numbers
1.Foundation	a) SBC of Soil.....kN/m ²			QCT 1, QCT20
	b) Min. Depth of Excavation.....(m)			QCT1, QCT 20
	c) Strength of Concrete (M20/M25/M30...)			QCT 13
2. Materials (Tests for relevant properties of all materials as per Standards)	a) Cement: (OPC/PPC grade)....53/43/33			QCT 16
	b) Steel:Grade :Fe415/500/550			QCT 8/QCT 14
	c) Coarse/Fine aggregates			QCT17/QCT2/ QCT3
	d) Metal: 20mm/40mm/100mm			
	e) Stones/Rubble			QCT4/QCT10
	f) Bricks/ S block/ Size...8"/6"/4"			QCT5/QCT11

Signature by,

Engineer in charge: AD:..... DD:.....

Stage of Work	Item of Work	Suitability Tests Conducted (Y/N)	Report/Remarks	Refer Table Numbers
3.Superstructure For BBM/SBM/SSM	a) Plinth beam/roof beam...M20/M25/M30			QCT8/QCT14 /QCT13
	b)Columns(M20/M25/M30)			QCT8/QCT14 /QCT13
	c) Staircase/lintel etc...(M20/M25/M30)			QCT8/QCT14 /QCT13
	d) Roof slab (M20.M25/M30)			QCT8/QCT14 /QCT13
	e) Strength of mortar CM 1:3/1:4/1:6/1:8			QCT 12
4. Finishing work	a) Plastering (CM1:3/1:4/1:6/1:8)			
	b) Electrical cable type 3/20.7/20, etc...			
	c) Water Supply			
	* Diameter of pipe GI/PV/UPVC/other			
	*Pressure/Smoke test for leakage checking			
	d) Sanitary			
	* Diameter/ Thickness of pipes SWR/PVC			
	*Depth laying/Laid			
	*Slope of Sanitary line			
	*Pressure/Smoke test for leakage checking			

**Indicate the brand name of Material used.*

Signature by,

Engineer in charge: AD:..... DD:.....



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CIRCLE, BANGALORE – 560 009

FORMAT - B

CHECK LIST FOR QUALITY CONTROL REPORT AT PROJECT
[ROAD WORKS]

PROJECT: Sub Division:..... Division:..... Zone:.....

Name of the work:

Work Code:

Date of Start:

Adm approval No. & date:

Fund released:

Tech.Sanction No. & date:

P.D.C:

Sl. No.	Item of Work	Suitability Tests Conducted (Y/N)	Report/Remarks	Refer Table Numbers
1	Formation/Embankment/Cutting,CD works.			QCT23 QCT27
2	Sub base			QCT24
3	Base course and Shoulders			QCT25
4	Wearing course and Shoulders			QCT26
5	CC Pavement			QCT27
6	Bitumen			QCT22
7	Road furnitures & protective works			

Signature by,

Engineer in charge: AD:..... DD:.....



KARNATAKA RURAL INFRASTRUCTURE DEVELOPMENT LIMITED
(FORMERLY KARNATAKA LAND ARMY CORPORATION LIMITED)
"GRAMEENABHIVRUDDHI BHAVAN", 4th & 5th FLOOR, ANANDA RAO
CIRCLE, BANGALORE – 560 009

FORMAT - C

CHECK LIST FOR QUALITY CONTROL REPORT AT PROJECT
[WATER SUPPLY]

PROJECT: Sub Division:..... Division:..... Zone:.....

Name of the work:

Work Code:

Date of Start:

Adm approval No. & date:

Fund released:

Tech.Sanction No. & date:

P.D.C:

Sl. No	Item of Work	Suitability Tests Conducted (Y/N)	Report/Remarks	Refer Table Number
1	Head Works			QCT28
2	Jackwell/Pump House			
3	Raw water raising main			
4	Aerator Settling tank Slow sand filter Clarifloculator Rapid sand filter Wash water tank			
5	Pure water sump			
6	Master balancing tank			
7	Over head tank			

Signature by,

Engineer in charge: AD:..... DD:.....



KARNATAKA RURAL INFRASTRUCTURE DEVELOPMENT LIMITED
(FORMERLY KARNATAKA LAND ARMY CORPORATION LIMITED)
"GRAMEENABHIVRUDDHI BHAVAN", 4th & 5th FLOOR, ANANDA RAO
CIRCLE, BANGALORE – 560 009

FORMAT - D

CHECK LIST FOR QUALITY CONTROL REPORT AT PROJECT (ELECTRICAL WORKS)

Project : Sub-Division Division Zone

Name of the work:

Work code :

Date of Start :

Admn approval No. & date :

Fund released :

Technical Sanction No. & Date

P.D.C :

Sl. No.	PARTICULARS	REMARKS	REFERENCE DOCUMENTS AND INSTRUMENTS USED FOR CHECKING
1	CONDUITING & WIRING WORK		Rigid PVC conduits will confirm to IS 9537 Part-I & II/1981 and MFRs test report must be with material.
2	SWITCH SOCKETS RECEPTECLES & JUNCTION BOXES		Switch & sockets will confirm to IS 3854 & IS 1293, MFRs test report must be with material. I.R check for circuits - Megger, Function check - Tong tester and Earthing megger.
3	LAN & TELEPHONE NETWORK		MFRs test report must be with material. Earthing - earth tester.

Signature by :

Engineer in charge: AD: DD:

Sl. No.	PARTICULARS	REMARKS	REFERENCE DOCUMENTS AND INSTRUMENTS USED FOR CHECKING
4	LT-SWITCH GEARS		MFRs test report must be with material. Calibration test - Multimeter, Polar Test-multimeter and Insulation resistance - Megger.
5	LIGHTING PANEL & LIGHTING DISTRIBUTION BOARD		MCE DBs will confirm to IS 18032/1991 LT panels will be fabricated as per IS 3623 & with IP 54 protection. Insulation resistance - Megger and Earthing -Megger.
6	LIGHTING FIXTURE		Luminaries will confirm to IS 10322, MFRs test report must be with material, Insulation resistance - Megger, Function check Earthing -Tong tester.
7	CEILING FAN & REGULATORS		Ceiling fan should confirm to IS 374-1979, MFRs test report must be with material. Insulation resistance - Megger, Function check-Tong tester and Earthing - Megger.

Signature by :

Engineer in charge: AD: DD:

Sl. No.	PARTICULARS	REMARKS	REFERENCE DOCUMENTS AND INSTRUMENTS USED FOR CHECKING
8	EXHAUST FAN		Exhaust fan should confirm to IS 2312, MFRs test report must be with material. Insulation resistance - Megger, Function check-Tong tester and Earthing-Megger
9	CALLING BELL AND BELL PUSH		Calling bell & bell pushes should confirm to IS specifications, MFRs test report must be with material. Insulation resistance - Megger, Function check - Tong tester and Earthing-Megger
10	MUSIC SYSTEM & ACCESSORIES		Music system & Accessories should confirm IS specifications, MFRs test report must be with material. Insulation resistance - Megger, Function check - Tong tester and Earthing-Megger.

Signature by :

Engineer in charge: AD: DD:

Sl. No.	PARTICULARS	REMARKS	REFERENCE DOCUMENTS AND INSTRUMENTS USED FOR CHECKING
11	SUBMERSIBLE/MONO BLOCK PUMPS		The pumps should confirm to IS 8034, MFRs test report must be with material. Insulation resistance - Megger, Function check - Tong tester and Earthing - Megger.
12	CABLING & TERMINATION LT-POWER & CONTROL		LTUG cable will confirm to IS-1854 (Part-1) 1988 multistand PVC copper wires will confirm to IS 694/990, MFRs test report must be with material, Insulation resistance - Megger, Earthing -Megger.
13	EARTHING		Earthing will be generally as per I.S-3043, MFRs test report must be with material, Earth resistance - earth tester.

Signature by :

Engineer in charge: AD: DD:

Reference makes of components to be used in the project		
1	6 Amps Ceiling rose, holdes, adopters, switches, bell push, bed switches, sockets, pin tops, indicators/16 amps switches, Universal sockets, Pin tops / 32 Amps DP switches / Calling bells, dimmers, stepped, regulators, PVC Gang boxes.	Lisha, Cona, Anchor, GM, Elle.
2	Modular switch, plates & PVC metal boxes	ABB, Anchor-Woods, MK-Warapround, Legrand - Mosaic, Salzer, LK, Clipsal.
3	Metallic plugs and sockets 3 pin single phase and 4 pins 3 phases. (Industrial Sockets & Plugs)	ABB, MDS, L&T, Hensal.
4	Main switches - D.P.S.T., T.P.S.T. in SM enclosure, SFU, SDF	ABB, L & T.
5	Change over switches	ABB, HPL, L & T Havells.
6	Miniature circuit breakers, Isolators, Earth Leakage Circuit Breakers, MCB distribution board	ABB, L&T, Siemens, MG, Legrand, Havells, HPL.
7	MCCBs	L&T, Legrand, ABB, MG, HPL Moeller, Siemens.
8	Motor Starters	L&T, ABB.
9	Electric Indoor/outdoor luminaries and their accessories	Philips, Wipro, Havells, Bajaj, Surya, CG, Schreder, Halonix, THORN.
10	PVC insulated, sheathed copper and Aluminium wire both single / multi-strand, single / multi-core FR/ FRLS wires.	Finolex, RR Cable, Polycab, Havells, Anchor, V-Guard, L&T, KEI, SBEE, Cobra.

Signature by :

Engineer in charge: AD: DD:

11	LED Lightings and Fittings	Philips, Bajaj, Havells, Surya, CG, THORN.
12	Timers and Astronomical Timers	L&T, Siemens, ABB, Spark Controls.
13	Contractors	ABB, Siemens, L&T, MG-Enerpact.
14	Under Ground 11 KV HT XLPE cables	CCI - Tropothen-X, Unistar.
15	Under Ground 1.1 LT cables	Unistar, Nicco, SBEE, Havells, CCI-Tropador.
16	Bulk head fitting	Philips, Bajaj, Wipro, GE, Havells.
17	Transformers Three Star Rated	Kirloskar, AREVA, Voltamp, ABB.
18	Electric Geysers	Racold, Bajaj, CG, Almanord, V-Guard.
19	Star rated Air Conditioners	Diken, Voltas, Carrier, Blue Star.
20	LT & HT cable Termination / Jointing Kits	Raychem, Repl, Birla-3M.
21	High Mast & Octagonal Poles	Bajaj, Aster, Surya, Havells.
22	Induction Lightings and Fittings	Bajaj, LVD-Raes.
23	Aviation Lamps	Philips, Havells, Surya.
24	Street light poles	Shubham, Pipe Corporation, Equivalent.
25	Capacitors	L&T, CG, ABB, Neptune, ASIAN, Siemens, EPCOS.
26	HRC fuses and porcelain fuse units	L&T, HPL, Siemens, Bentec, Havells, Indo-Asian, C&S, Standard.
27	Single-Phase preventor	L&T, ABB, Siemens, Meeco, Minilac, HPL.
28	Decorative Fittings	K-lite, Pasolite, Hallonix, Thorn, Havells.
29	Heating Elements	Eltek, Swarna, Bajaj.
30	Measuring/Indicating instruments	L&T, Meeco, C&S, Telemecanic, Legrand.
31	Indication/ Pilot lamps	C&S, Legrand, Safetech, Telemecanic, Vaishno, Equivalent.
32	Arial bunched cable LT/H	Unistar, CCI, SBEE, Snakti, Pyman.

Signature by :

Engineer in charge: **AD:** **DD:**

33	11 KV GOS	BHEL, Birla, VGV, Jayashree.
34	HT Load Breake switches	Vyoma, Venkateshwara, Star Switch Gear.
35	Batteries for DG and UPS backup	Exide, Amaron, Prestolite, Panasonic, Amco, UBMEC.
36	Uninterrupted Power Supply units	APC, Cosmic, Seimens, Merlin-Gerin.
37	Copper / Alluminum cable sockets/terminals	Dowells, Braco, Ravi, Jainson.
38	G.I.Pipe	TATA, Zenith, Surya-Prakash, Jinadal.
39	Solar water heater/Solar lights	TATA BP Solar, Solarizer, Surya Shakthi, Disol, Enolar, Nuetech, Anu-Solar, Kinara Solar.
40	Ceiling fans, Wall mounting fans, Exhaust fans, Air blower.	CG, Khaithan, Bajaj, USHA, Polar, Havells, Almanord, Orient, Anchor, ACO.
41	PVC insulation tape	Wonder, BHORS, Steel-Grip.
42	PVC Conduits, PVC Flexible conduits and accessories	Finolex, PloyCab, Universal, Avonplast, Nelco, VIP.
43	Metal Conduits, Metal Flexible conduits and accessories	GB, Bharath, TATA.
44	PVC casing and capping and accessories	Modi, Classic, Polycab, Kaveri, VIP, Avonplast.
45	Lamps, CF Lamps, Tubes and Bulbs	Philips, CG, C&S, Bajaj, Indo-Asian, HPL, Anchor, Wipro, Havells, Hallonix, OSRAM, Venture, GE, Surya, ASPA, Sylvania.
46	Air-Circuit Breakers	(Microprocessor Based).
47	Double Wall Corrugated Pipe	L&T, ABB, HPL, Siemens, Schneider.
48	Thermo Plastic Metering Panle and Feeder Piller	(Thermal Magnetic Based).
49	Race Ways	L&T, ABB, HPL, Havells, Schneider.
50	Energy Saving Devices	Duroline, Rex Poleymer.

Signature by :

Engineer in charge: AD: DD:

**QUALITY CONTROL
TEST TABLES**

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**QUALITY CONTROL TESTS BEFORE
CONSTRUCTION (BUILDING WORKS)**

1) Simple/Hand Feel Tests for Soil:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 1: Simple/Hand Feel Tests for Soil

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Soil type and color		
(b)	Dilatancy Test		
(c)	Dry Strength Test		
(d)	Toughness Test		
(e)	Plasticity Index		
(f)	Optimum Moisture Content		
(g)	Presence of Deleterious Material		

Countersigned by:

AD:

DD:

JD:

(2) Simple/Handfeel tests for Fine Aggregates/Sand:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 2: Simple/Hand Feel Tests for Fine Aggregates/Sand

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Name of quarry, color, fine or coarse		
(b)	Presence of silt/clay		
(c)	Sedimentation		
(d)	Organic impurities		

Countersigned by:

AD:

DD:

JD:

(3) Simple/Handfeel tests for Coarse Aggregates:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 3: Simple/Hand Feel Tests for Coarse Aggregates

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Quarry, color and size		
(b)	Appearance		
(c)	Porous Test		
(d)	Presence of mica		

Countersigned by:

AD:

DD:

JD:

4) Simple/Hand Feel Tests for Stones:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 4: Simple/Hand Feel Tests for Stones

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Quarry and color		
(b)	Appearance		
(c)	Hammer test		
(d)	Soundness test		
(e)	Chemical test		

Countersigned by:

AD:

DD:

JD:

5) Simple/Hand Feel Tests for Bricks:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 5: Simple/Hand Feel Tests for Bricks

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Type and color		
(b)	Shape, size and weight		
(c)	Efflorescence		
(d)	Water absorption		
(e)	Soundness		
(f)	Toughness		

Countersigned by:

AD:

DD:

JD:

6) Simple/Hand Feel Tests for Water:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 6: Simple/Hand Feel Tests for Water

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Color and Taste		
(b)	Appearance		
(c)	Litmus paper test		
(d)	Quality (Setting &Hardening time of cement pat)		

Countersigned by:

AD:

DD:

JD

7) Simple/Hand Feel Tests for Cement:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 7: Simple/Hand Feel Tests for Cement

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Make, grade and date of manufacture		
(b)	Temperature		
(c)	Smoothness		
(d)	Floating Test		
(e)	Strength Test		
(f)	Setting Time		
(g)	Soundness		
(h)	Fineness		

Countersigned by:

AD:

DD:

JD

8) Tests before construction for steel:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 8: Tests before construction for Steel

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Type, grade and weight		
(b)	Pitch of Ribs and Nominal Diameter		

Countersigned by:

AD:

DD:

JD

9) Tests before construction for Formwork:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 9: Tests before construction for Formwork

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Type and Thickness of Steel tubes		
(b)	Dia of 'ballies'		
(c)	Straightness		
(d)	Cleanliness		

Countersigned by:

AD:

DD:

JD

**QUALITY CONTROL TESTS /CHECKS
DURING CONSTRUCTION
(BUILDING WORKS)**

1) Tests/Checks for Stone masonry during construction:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 10: Tests/Checks for Stone masonry during construction

Sl. no	Test/Check	Description and Remarks	Signature (AE/JE)
1	Bond and Plumbness [For stability and appearance with plumb bob]		
2	Laying in Mortar [Horizontal of courses verticality and staggering of joints]		
3	Individual Course[Height Joint Thickness and laying(IS:1597 part 1&2 and IS:2212)]		
4	Top of coping [Sloping to drain off water]		
5	Arches(Additional Tests) a) Centering and simultaneous commencement of work from both ends(IS:2118) b) Compaction and thickness of filling material over crown and haunches c) Erection of abutment pier for multiple arches d) Thickness of Joints		

Countersigned by:

AD:

DD:

JD:

2) Tests/Checks for Brickwork during construction:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 11: Tests/Checks for Brickwork during construction

Sl.no.	Test/Checks	Description and remarks	Signature (AE/JE)
1	Bond and Plumbness [English bond, verticality by For each course Plumb bob]		
2	Laying in Mortar [Laying in full bed of mortar with proper lapping.]		
3	Individual Course [Height of course and Joint thickness(IS:2212)]		
4	Top of coping [Height of course and Joint thickness(IS:2212)]		
5	Mortar for Joints [Mix Proportion]		
6	Arches(Additional Tests) [Dimensions of abutment- pier for multiple arches(IS:2118), Centering of arch, Compaction & thickness of filling material over crown & arches, Thickness of joints]		

Countersigned by:

AD:

DD:

JD:

3) Tests/Checks for Cement mortar during construction:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 12: Tests/Checks for Cement mortar during construction

Sl.no.	Test/Check	Description and Remarks	Signature (AE/JE)
1	Mix proportion [cement:sand]		
2	Consistency		

Countersigned by:

AD:

DD:

JD:

4) Tests/Checks for Concrete during construction:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 13: Tests/Checks for Concrete during construction

Sl.no.	Test/Check	Description and Remarks	Signature (AE/JE)
1	Fine and coarse aggregate[Moisture content]		
2	Quantity of concrete[materials & mix proportion as per mix design/ as per nominal mix]		
3	Concrete [Workability(IS:1199), Cube Strength(IS:516)]		
4	Construction Joints [Fixing location before concreting and resumption of work]		
5	Formwork [For stability, leakage of slurry, bulging etc.]		
6	Concreting [Transporting/placing segregation of concrete, Precautions for hot weather or cold weather concreting, Compaction with vibrators]		
7	Curing of concrete [Regular inspection]		

Countersigned by:

AD:

DD:

JD:

5) Tests/Checks for Steel reinforcement during construction:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 14: Tests/Checks for Steel reinforcement during construction

Sl.no.	Test/Check	Description and Remarks	Signature (AE/JE)
1	Fabrication of steel as per structural drawings		
2	Splicing and Welding		
3	Tolerences(Spacing and Cover)		

Countersigned by:

AD:

DD:

JD:

6) Tests/Checks for Formwork during construction:

Name of project:

Place of work:

Date & Time:

Name of work:

Estimation cost:

QCT 15: Tests/Checks for Formwork during construction

Sl.no.	Test/Check	Description and Remarks	Signature (AE/JE)
1	Clamps for strength and stability of Form work		
2	Camber and Surface smoothness		
3	Mortar tightness		
4	Supporting system on ground (To prevent settlement and distribution of load)		
5	Safe access onto and about the formwork		
6	Height of panels for supporting structures and return walls		

Countersigned by:

AD:

DD:

JD:

**LABORATORY TESTS FOR
CONSTRUCTION MATERIALS**

1. Tests on Cement:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 16: Laboratory tests on Cement

Sl.no	Tests carried out	BIS code Ref.	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	Fineness a) Blaines($\text{cm}^2/\text{g m}$) b) Sieve analysis	4031-Part II 1988 4031- Part I 1988				
2	Compressive strength(kg/cm^2) [1day,3days,7days& 28days]	4031-Part VI 1988				
3	Initial and Final Setting Time	4031-PartV 1988				
4	Soundness	4031-Part III 1988				
5	Consistency	4031-Part IV 1988				
6	Drying Shrinkage	4031-Part X 1988				
7	Heat of Hydration	4031-Part IX 1988				
8	Specific Gravity	2720-Part III				

Countersigned by:

AD:

DD:

JD:

2. Tests on Aggregates:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 17: Laboratory tests on Aggregates

Sl.no.	Tests carried out	BIS code Ref.	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	Sieve Analysis	2386 Part I 1963				
2	Water absorption	2386 Part III 1963				
3	Aggregate abrasion value	2386 Part IV 1963				
4	Aggregate crushing value	2386 PartIV 1963				
5	Aggregate impact value	2386 Part IV 1963				
7	Flakiness index	2386 Part I 1963				
8	Elongation index	2386 Part I 1963				

Countersigned by:

AD:

DD:

JD:

3. Tests on Fresh concrete:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 18: Laboratory tests on Fresh concrete

Sl.no.	Tests carried out	BIS code Ref.	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	Workability a) Slump test b) Compacting factor test c) Vee-Bee d) Flow test	1199-1959				
2	Analysis of freshly mixed concrete	1199-1959				
3	Unit weight	1199-1959				
4	Setting time	8142-1976				
5	Air content	1199-1959				

Countersigned by:

AD:

DD:

JD:

4. Tests on Hardened concrete:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 19: Laboratory tests on Hardened concrete

Sl.no.	Tests carried out	BIS code Ref.	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	Non-Destructive tests a) Rebound hammer test b) Ultrasonic pulse velocity					
2	Compressive strength					
3	Flexural strength	IS:516-1959				
4	Concrete core testing	IS:1199-1959				
5	Drying shrinkage	IS:1199-1959				

Countersigned by:

AD:

DD:

JD:

5. Tests on Soil:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 20: Laboratory tests on Soil

Sl.no.	Tests carried out	BIS code Ref.	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	Water content a)Oven drying method b)Calcium carbide method					
2	Particle size distribution	7270-1985 Part-IV				
3	Liquid limit	7270-1985 Part-V				
4	Plastic limit	7270-1985 Part-V				
5	Free swell index	7270-1977 Part-XL				
6	Specific gravity	270-PartIII 1980				
7	Maximum dry density & optimum moisture content					
8	In-situ dry density a)Core cutter method b)Sand replacement method					

Countersigned by:

AD:

DD:

JD:

6. Tests on Water:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 21: Laboratory tests on Water

Sl.no.	Tests carried out	BIS code Ref.	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	PH value	IS 3025-1964				
2	Concentration of solids in water					
3	Sulphate impurities					
4	Organic / Inorganic solids	456-1978				
5	Chloride content					

Countersigned by:

AD:

DD:

JD:

7. Tests on Bitumen:

Sample:

Reference No:

Date & Time:

Name of project:

Place of work:

Name of work:

Estimation cost:

QCT 22: Laboratory tests on Bitumen

Sl.no.	Tests carried out	BIS code Ref	Results obtained		Remarks	Signature (AE/JE)
			As per Standard	As per report		
1	Bitumen content					
2	Specific gravity	IS 1202-1978				
3	Marshall stability					
4	Penetration	IS 1203-1978				
5	Flash point and Fire point	IS 1448-1969				
6	Softening point	IS 1205-1978				
7	Ductility	IS 1208-1978				

Countersigned by:

AD:

DD:

JD:

**SUITABILITY TESTS CONDUCTED ON
MATERIAL PRIOR TO
CONSTRUCTION (ROAD WORKS)**

1. For Embankment/Cutting/Subgrade:

QCT 23: Tests before construction for Embankment/Cutting/Subgrade

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Wet Sieve Analysis		
(b)	Atterberg's limits		
(c)	Standard Proctor compaction test		
(d)	Free Swell Index test		
(e)	California Bearing Ratio test		

Countersigned by:

AD:

DD:

JD:

2. For Sub-Base or Soil/Gravel Aggregate Base:

QCT 24: Tests before construction for Sub-Base or Soil/Gravel Aggregate Base

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Wet Sieve Analysis		
(b)	Atterberg's limits		
(c)	Combined Gradation		
(d)	Plasticity tests		
(e)	Standard Proctor compaction test		
(f)	Wet Aggregate Impact Value test		
(g)	California Bearing Ratio test		

Countersigned by:

AD:

DD:

JD:

3. For WBM Base:

QCT 25: Tests before construction for WBM Base

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Aggregate Impact Value Test		
(b)	Water Absorption		
(c)	Soundness Test		
(d)	Gradation of Crushable Screenings		
(e)	Atterberg's limits of binding materials		
(f)	Flakiness index		

Countersigned by:

AD:

DD:

JD:

4. For Surface Course:

QCT 26: Tests before construction for Surface Course

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Viscosity test(Prime coat & Track coat)		
(b)	Residue on 600 micron Sieve test (Prime coat & Track coat)		
(c)	Storage stability (Prime coat & Track coat)		
(d)	Penetration test (Bitumen)		
(e)	R&B Softening point test(Bitumen)		
(f)	Ductility test(Bitumen)		
(g)	Flakiness Index(Aggregates)		
(h)	AIV test(Aggregates)		
(i)	Soundness test		
(j)	Water Absorption (Aggregates)		
(k)	Anti-Stripping(Aggregates)		

Countersigned by:

AD:

DD:

JD:

5. For Cross drainage & CC Pavement:

QCT 27: Tests before construction for Cross drainage & CC Pavement

Sl.no.	Tests	Description and Remarks	Signature (AE/JE)
(a)	Shape & dimension (Stones)		
(b)	Water absorption (Stone & Coarse aggregates)		
(c)	Dressing of stones		
(d)	Setting time of cement		
(e)	Soundness		
(f)	Compressive strength of mortar cubes		
(g)	Gradation of Sand		
(h)	Deleterious materials & Organic impurities		
(i)	Gradation of coarse aggregate		
(j)	Flakiness index		
(k)	Deleterious constituents		
(l)	Water absorption		
(m)	Aggregate Impact Value Test		
(n)	Grade, percentage, elongation, ultimate tensile strength, pitch of rib, nominal diameter, protection for steel.		

Countersigned by:

AD:

DD:

JD:

**SUITABILITY TESTS CONDUCTED ON
MATERIAL PRIOR TO
CONSTRUCTION (WATER SUPPLY)**

