



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली - 110 075 • G-5 & 6, Sector-10, Dwarka, New Delhi-110075

दूरभाष/Phone : 91-11-25074100 / 25074200



भाराराप्रा/नीति दिशानिर्देश /मानक दस्तावेज़/ 2026 नीति परिपत्र सं. 11.97/ 2026 दिनांक 14th जुलाई, 2026

{{ई-ऑफिस फाइल सं. DPR-12024/5/2026- DPR Cell (कम्प्यूटर सं. 312460 पर लिया गया निर्णय)}}

NHAI/ Policy Guidelines/ Standard Documents /2026 Policy Circular No. 11.97/2026 dated 14th July, 2026

{{(Decision taken on E-Office File No. DPR-12024/5/2026- DPR Cell (Comp No. 312460)}}

विषय: राष्ट्रीय राजमार्गों और द्रुतमार्गों के टोल प्लाज़ाओं पर स्थित शौचालय ब्लॉकों के मानकीकरण संबंधी नीति परिपत्र सं. 11.93 दिनांक 11.05.2026 की प्रयोज्यता के संबंध में स्पष्टीकरण।

Sub.: Standardization of Toilet Blocks at Toll Plazas on National Highways and Expressways - Clarification regarding applicability of Policy Circular No. 11.93 dated 11.05.2026 - reg.

संदर्भ: (i) सड़क परिवहन और राजमार्ग मंत्रालय का परिपत्र सं. एनएच-15017/31/2024-पीएवंएम, दिनांक 29.05.2026.

(ii) भाराराप्रा का नीति परिपत्र सं. 11.93, दिनांक 11.05.2026.

Ref.: (i) MoRT&H Circular No. NH-15017/31/2024-P&M dated 29.05.2026.

(ii) NHAI Policy Circular No. 11.93 dated 11.05.2026.

“राष्ट्रीय राजमार्गों और द्रुतमार्गों के टोल प्लाज़ाओं पर स्थित शौचालय ब्लॉकों के मानकीकरण” के संबंध में दिनांक 11.05.2026 को नीति परिपत्र संख्या 11.93 जारी किया गया था जिसमें राष्ट्रीय राजमार्गों और द्रुतमार्गों के टोल प्लाज़ाओं पर शौचालय सुविधाएं विकसित करने हेतु मानकीकृत आरेखण और विनिर्देश निर्धारित किए गए थे।

Policy Circular No. 11.93 dated 11.05.2026 was issued regarding "Standardization of Toilet Blocks at Toll Plazas on National Highways and Expressways", prescribing standardized drawings and specifications for development of toilet facilities at Toll Plazas on National Highways and Expressways.

2. तत्पश्चात, सड़क परिवहन और राजमार्ग मंत्रालय ने अपने परिपत्र सं. एनएच-15017/31/2024-पीएवंएम दिनांक 29.05.2026 (प्रतिलिपि संलग्न है) द्वारा राष्ट्रीय राजमार्गों और पहुँच नियंत्रित राष्ट्रीय हाई-स्पीड कॉरिडोरों पर शौचालय की सुविधाओं के निर्माण के संबंध में निर्देश दिया कि मौजूदा सुविधाओं की स्थिति के आधार पर शौचालय ब्लॉक का अपग्रेडेशन या उसका पुनर्निर्माण किया जा सकता है, अन्य बातों के साथ-साथ, मंत्रालय ने चल रही परियोजनाओं में शौचालय सुविधाएं लागू करने हेतु और भी निर्देश जारी किए गए।

Subsequently, Ministry of Road Transport & Highways, vide its Circular No. NH-15017/31/2024-P&M dated 29.05.2026 (Copy enclosed) regarding construction of toilet facilities along National Highways and Access Controlled National High-Speed Corridors, inter alia, directed that toilet blocks may be upgraded or reconstructed based on the condition of the existing facilities and issued further directions for implementation of toilet facilities on ongoing projects.

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3. तदनुसार, सड़क परिवहन और राजमार्ग मंत्रालय द्वारा जारी अनुवर्ती निर्देशों को ध्यान में रखते हुए और चल रही उन परियोजनाओं के मामलों के समाधान के लिए जहां शौचालय निर्माण का कार्य पहले ही आरंभ हो चुका है, नीति परिपत्र संख्या 11.93 दिनांक 11.05.2026 के पैरा 5 में उल्लेखित लागू प्रावधानों में एतद्वारा आंशिक रूप से निम्नलिखित परिवर्तन किए जाते हैं:

Accordingly, in view of the subsequent directions issued by Ministry of Road Transport & Highways and to address cases of ongoing projects where construction of toilet facilities has already commenced, the applicability provisions contained in Para 5 of Policy Circular No. 11.93 dated 11.05.2026 are hereby partially modified as under:

- A. सभी नई परियोजनाओं में, निर्माण कार्य नीति परिपत्र सं. 11.93 दिनांक 11.05.2026 में विनिर्दिष्ट मानक आरेखणों और विनिर्देशों के अनुसार ही किया जाएगा। इन प्रावधानों को सभी नए डीपीआर की अनुसूची-‘ग’ में शामिल किया जाएगा। जिन परियोजनाओं के लिए बोलियां आमंत्रित की गई हैं किन्तु अभी तक प्राप्त नहीं हुई हैं, उनमें आरएफपी में संशोधन जारी करके इन प्रावधानों को अनुसूची-‘ग’ में शामिल किया जाएगा।

In all new projects, construction shall be undertaken strictly in accordance with the standard drawings and specifications prescribed vide Policy Circular No. 11.93 dated 11.05.2026. The provisions shall be incorporated in Schedule-‘C’ of all the new DPRs. In Projects where bids have been invited and not yet received, the provisions shall be incorporated in Schedule-‘C’ by issuing amendment in the RFP.

- B. चल रही परियोजनाओं में, जहाँ अभी निर्माण आरंभ नहीं हुआ है, वहाँ मानक प्रावधान अपनाए जाएंगे। करार में कार्य के दायरे में बदलाव (सीओएस) के लिए विनिर्दिष्ट प्रत्यायोजन के अनुसार, मौजूदा प्रावधानित लागत को घटाकर इसे सीओएस के अंतर्गत लागत में होने वाली शुद्ध वृद्धि के लिए लिया जाएगा। ऐसी सुविधा का संचालन और रखरखाव करार के प्रावधानों के अनुसार संविदाकार / कंसेसनेयर के दायरे में होगा।

In ongoing Projects where construction has not commenced, the standardized provisions shall be adopted: The same shall be taken under Change of Scope (COS) for net increase in cost by deducting the existing provisioned cost, as per the delegated powers for COS in the Contract. The operation and maintenance of such facility shall be in the scope of the Contractor/ Concessionaire as per provisions of the contract.

- C. चल रही परियोजनाओं में, जहाँ शौचालय सुविधाओं का निर्माण कार्य आरंभ हो गया है किन्तु पूर्ण नहीं हुआ है, वहाँ उपर्युक्त पैरा (ख) के अनुसार निर्माण के चरण, तकनीकी व्यवहार्यता, लागत और स्थल की बाधाओं को ध्यान में रखते हुए सुविधाओं को अपग्रेड करने / उनमें संशोधन करने सहित मानक प्रावधान लागू करने संबंधी निर्णय संबंधित क्षेत्रीय अधिकारी द्वारा लिया जाएगा।

In ongoing Projects where construction of toilet facilities has commenced but has not been completed, decision regarding incorporation of the standardized provisions including upgradation/modification of the facilities, based on the stage of construction technical feasibility, cost implications and site constraints, shall be taken by the concerned Regional Officer on a case-to-case basis and shall be dealt with as per Para (b) above.

- D. ऐसे मामलों में जहाँ ऐसी सुविधाएं पहले से ही निर्मित हैं, वहाँ उनकी स्थिति, उपयोगिता, पहुंच और स्थल संबंधी बाधाओं के आधार पर उन्हें अपग्रेड करने / उनके पुनर्निर्माण का निर्णय संबंधित माननीय सदस्य द्वारा मामला-दर मामला आधार पर किया जाएगा।

In cases where such facilities are already constructed, decision regarding upgradation/re-construction based on condition, utilization, accessibility and site constraints shall be taken by the Member concerned on a case-to-case basis.

Contd....3/-



- E. क्षेत्रीय अधिकारी को भाराराप्रा नीति परिपत्र संख्या 1.6.6 दिनांक 11.10.2023 के क्रम संख्या II के पैरा एफ ("लागत") में विनिर्दिष्ट दरों के अनुसार, ऐसे निर्माण की सैद्धांतिक लागत को मंजूरी देने के लिए अधिकृत किया गया है, इस लागत में बिजली और साफ-सफाई के कार्यों का व्यय भी शामिल होगा। तत्पश्चात, व्यवहार्यता और आवश्यकता के आधार पर, या तो किसी एक टोल प्लाज़ा के लिए विस्तृत आकलनों के आधार पर बोलियाँ आमंत्रित करके, या फिर कई टोल प्लाज़ाओं को एक ही करार में शामिल करके निर्माण कार्य किया जाएगा। इसका भुगतान बीओक्यू के आधार पर वास्तविक रूप से मदवार मात्रा के अनुसार किया जाएगा।

The Regional Officer is delegated the power to approve the in-principle cost of such construction in accordance with the rates prescribed under Para F ("COST"), Sr. No. II of NHAI Policy Circular No. 1.6.6 dated 11.10.2023, inclusive cost of electrical, sanitary works. Construction shall thereafter be undertaken through invitation of bids based on detailed estimates for an individual Toll Plaza or by grouping multiple Toll Plazas under a single contract, depending upon feasibility and requirement. The payment shall be made as per actual item wise quantity executed based on BOQ.

4. यदि मौजूदा शौचालय ब्लॉक के पुनर्निर्माण सहित शौचालय ब्लॉक के निर्माण, अपग्रेडेशन और रखरखाव का कार्य करार या रियायत अनुबंध में शामिल नहीं है, तो इसके लिए व्यय 'स्वच्छता कार्य योजना' के अंतर्गत उपलब्ध निधि से किया जा सकता है।

The expenditure for construction, up-gradation and maintenance of toilet blocks, including reconstruction of existing toilet blocks, may be met out of the funds available under the Swachhata Action Plan, if not covered under the contract or concession agreement.

5. नीति परिपत्र सं. 11.93 दिनांक 11.05.2026 के अन्य सभी प्रावधान अपरिवर्तित रहेंगे।
All other provisions of Policy Circular No. 11.93 dated 11.05.2026 shall remain unchanged.

6. यह सक्षम प्राधिकारी के अनुमोदन से जारी किया जाता है।
This issues with the approval of Competent Authority.

संलग्नक: यथोपरी।

Encl.: As stated above.

(सीएस. संजय कुमार पटेल/ CS. Sanjay Kumar Patel)

प्रभारी मुख्य महाप्रबंधक(समन्वय) (i/c) Chief General Manager (Coord.)

प्रति/ To:

भाराराप्रा मुख्यालय/आरओ/पीआईयू/सीएमयू/साइट कार्यालयों के सभी अधिकारी।

All Officers of NHAI HQ/ ROs/ PIUs/ CMUs/ Site Offices.

प्रतिलिपि/ Copy to:

1. पुस्तकालय की साइट पर प्रकाशन के लिए पुस्तकालय को।
Library for hosting the Circular on Library site.
2. परिचालन के लिए वेब एडमिन को।
Web Admin for Circulation.
3. सचिव, सड़क परिवहन और राजमार्ग मंत्रालय के प्रधान निजी सचिव को सूचनाार्थ।
PPS to Secretary, MoRT&H for Kind Information.

F. No. NH-15017/31/2024-P&M
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
(Planning Zone)

Transport Bhawan, 1, Parliament Street, New Delhi- 110001.

Dated, the 29th May, 2026

To,

1. The Chairman, National Highways Authority of India, Dwarka, New Delhi-110075
2. The Managing Director, NHIDCL, World Trade Centre, New Delhi-110029

Subject: Construction of Toilets along National Highways / Access Controlled National High-Speed Corridors / Expressways - reg.

Sir,

The undersigned is directed to intimate that from 2017, construction of toilets on all User Fee Plazas of National Highways (NHs) were taken up by NHAI. All such works were taken up under Swachhata Action Plan (SAP). In continuation to these efforts and considering the importance of providing basic amenities to highway users during travel on NHs, it has been decided to take up construction of toilets facilities through NHAI/NHIDCL at all User Fee Plazas *in both directions after crossing the User Fee Plaza*, where such facilities are not available at present. Toilet Blocks may be upgraded or reconstructed based on the condition of the existing ones where already constructed.

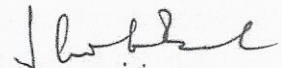
2. On newly completed access-controlled highways, there are generally no toilet facilities available along the NHs, as Wayside Amenities (WSAs) are yet to come up. Therefore, till WSA facilities come up on such highways, temporary pre-fabricated or Mobile Toilet Blocks may be constructed or placed at the location of WSAs by the Concessionaire to whom development of WSA has been given or by NHLML where the Concessionaire has not been engaged for WSA. Where the Concessionaire has not been engaged, the cost of establishing the Mobile Toilet Block and its operations will be met from the Swachhata Action Plan (SAP) funds to be provided by MoRT&H.

3. Each toilet block shall consist of three portions - one each for male and female and another portion with facility for differently abled persons. For each of the male / female portion, there shall be at least three toilets (2 western and one Indian), three urinals (only for Male portion) and three wash basins with associated equipment and provisions.

4. All toilet blocks shall have 24x7 water supply and 24x7 housekeeping staff for ensuring cleanliness. External CCTV monitoring system may be set up for security purposes where required. All such facilities shall be equipped with appropriate quality fittings/fixtures as per extant CPWD specifications along with availability of good quality toiletries and drinking water facility. Entire toilet block area should have appropriate lighting facility (both inside and outside), preferably through solar powered systems if possible.

5. The responsibility for operation and maintenance of the Toilet Blocks at User Fee Plaza shall be with the respective Contractor/Concessionaire or in the case of NHLML established Toilet Blocks at locations of Wayside Amenities where no Concessionaire has been engaged, the agency engaged by NHLML for the purpose.
6. Appropriate information signages shall be installed on the NH in advance to indicate location of toilet blocks for proper facilitation to the highway user.
7. Availability of toilet blocks shall be suitably mapped so that the same can be shared on Rajmarg Yatra App for public.
8. Moreover, in case of already constructed/operational toilet blocks, proper upkeep/ upgradation, cleanliness and maintenance of such toilets need to be ensured. In case it is required, upgradation or reconstruction of the toilet blocks may be undertaken by NHAI.
9. In order to maintain standard design/layout of toilet block across the country, NHAI is requested to prepare a standard layout plan following the above minimum criterion along with details of fixtures / fittings and other facilities. The same shall be shared with NHIDCL, NHLML and Ministry within 30 days. A sample layout and specification is attached for ready reference of NHAI.
10. Expenditure for construction / upgradation / maintenance of toilet blocks including reconstruction of existing toilet blocks may be met out from the funds available under Swachhata Action Plan, if not covered under the contract or concession agreement.
11. NHIDCL will take up works on stretches entrusted to NHIDCL and stretches entrusted with State Govt in NER Region. In rest all other NH sections, Toilet facilities shall be developed by NHAI.
12. This issue with the concurrence of Finance Wing and approval of Competent Authority.

Yours faithfully,



(Shoba Basil)

Under Secretary to Government of India

Tel. No.011-23719850

Email: planningmorth@gmail.com

Copy to: -

1. Member (Admn), NHAI: - With a request that action taken may be indicated monthly in a standard format and reviewed in SOM from July onwards
2. CEO, NHLML: - With a request that action taken may be indicated monthly in a standard format and reviewed in SOM from July onwards
3. CEO, IHMCL: - With a request that action taken may be indicated monthly in a standard format and reviewed in SOM from July onwards
4. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110010
5. The Principal Secretaries / Secretaries of all States/ UTs, Public Works Department (dealing with National Highways)

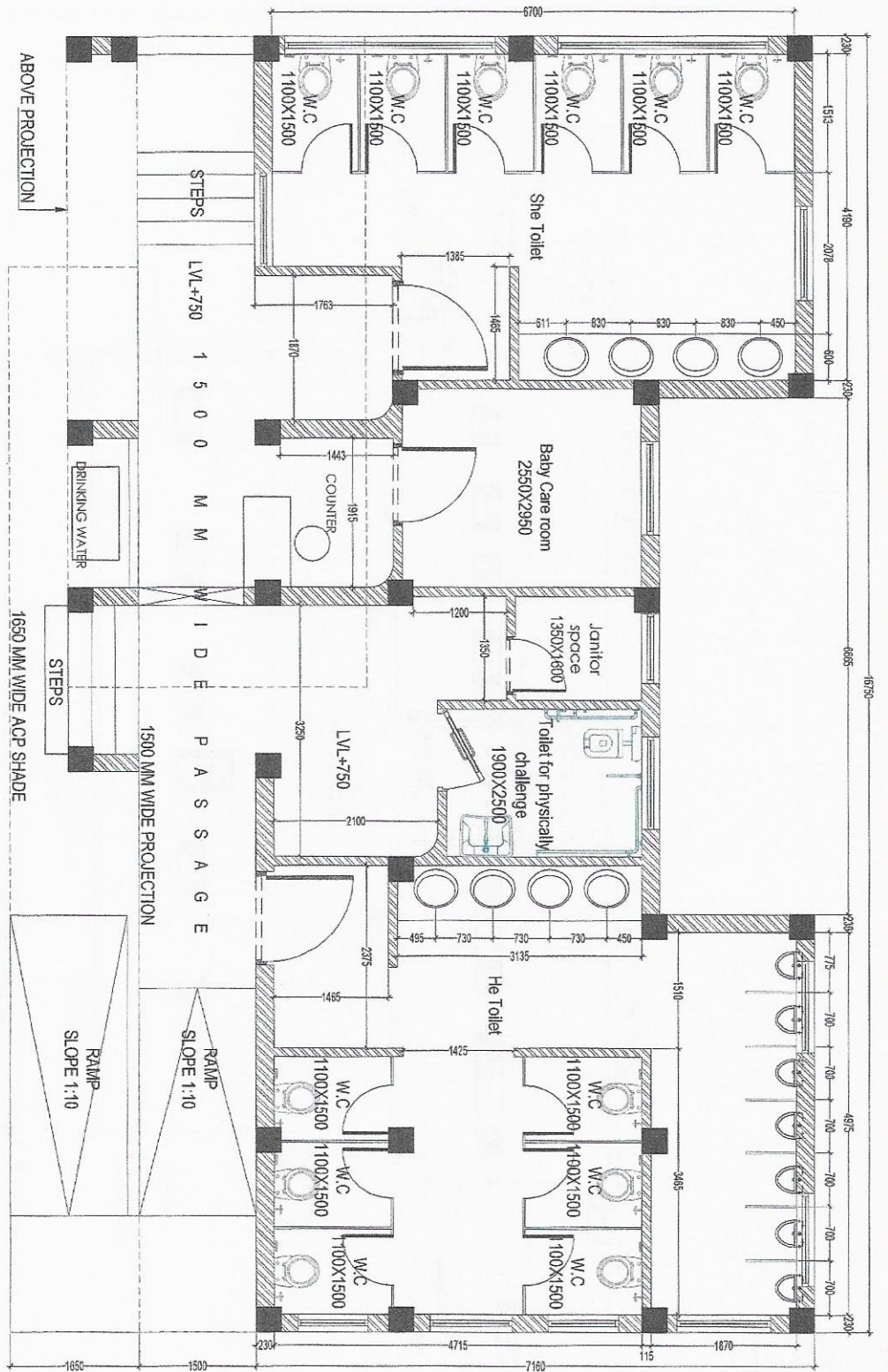


6. The Engineers-in-Chief and Chief Engineers of all States / UTs Public Works Department (dealing with National Highways)
7. All Regional Officers of MoRT&H
8. Secretary General, Indian Roads Congress
9. Director, IAHE / CE (S&R)
10. NIC - with the request to upload on MoRTH website

Internal circulation: -

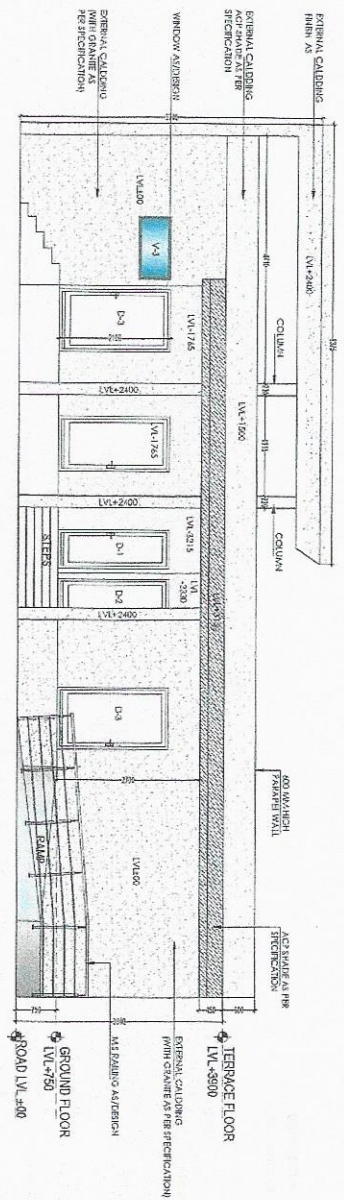
PSO to Secretary (RT&H) / PSO to DG(RD)&SS / Sr. PPS to AS&FA / AS(T) / PPS to All ADGs / CEs / JSs



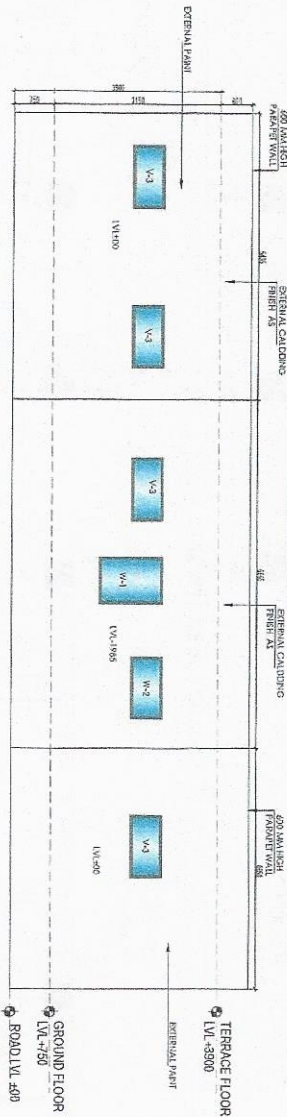


STANDARD DRAWING FOR A TOILET 1204-qm			
TITLE:-		TOILET LAYOUT	
DATE:- 21-03-2026	DRG. NO. :- 001	DESIGNED BY:-	RECOMMENDED:-
		DESIGN ENGINEER	APPROVED:-

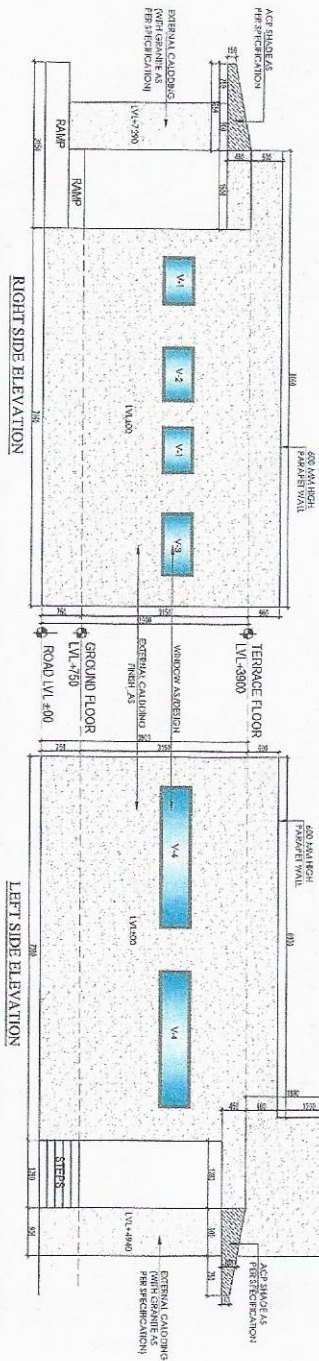
Handwritten signature



FRONT ELEVATION



REAR ELEVATION



RIGHT SIDE ELEVATION

LEFT SIDE ELEVATION

STANDARD DRAWING FOR A TOILET 120sqm

TITLE:-

ALL SIDES ELEVATION

DATE:- 24-03-2025

DESIGNED BY:-

DRG. NO. :- 003

RECOMMENDED:-

APPROVED:-

DESIGN ENGINEER

Handwritten signature/initials.

Detailed Specifications for Toilet Block				
S.No	Item	Description	Recommended Make / Approved Material	Remarks
1	EARTH WORK			
	Anti Termite Treatment-	For creating a continuous chemical barrier under and around the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall and floor along the external perimeter of building expansion joints, over the top surface of consolidated earth of which approach is to be laid surrounding of pipes and conduits etc. complete as per specification.	Bayer (Premise/Temprid), Syngenta, FMC, UPL, and Pidilite (Terminator) and equivalent	
2	CONCRETE WORK			
i)	PCC work :-	Using cement concrete M15 grade in foundations/ plinth and bedding including spreading, ramming, consolidation		
ii)	PVC Sheet	Providing & Laying one layer of LDPE sheet of 100 Microns thick approved quality on Plinth		
iii)	M-25	Ready mix concrete manufactured in fully automatic Batching Plant and transported to site in transit mixer for having continuous agitated mixer, manufactured as per approved mix design of specified grade of RCC work including pumping of R.M.C. from transit mixer to site of laying.		
iv)	TMT Reinforcement Work	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete all level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	TISCO, SAIL, VIZAG STEEL (RINL), JISCO, JVSL, LLOD STEEL, ESSAR and equivalent	
3	MASONRY WORK	Brick masonry with F.P.S. bricks of class designation 75 in foundation and plinth with bricks at any height/ position using Cement mortar 1 : 4 (1 cement : 4 coarse sand)		
i)		Providing and laying Autoclaved Aerated Concrete (AAC) blocks masonry 150mm/230mm/300mm thick with Grade-I AAC blocks in superstructure above plinth level. Specific partition wall between WC and Urinals shall only be upto lintel /Door height.		
4	FINISHING			
i)	Internal Plaster :-	20 mm thick in CM 1:4		
ii)	External Plaster :-	20mm thick in two coats first (12mm) in CM 1:4 & second (8 mm) in 1:4		
iii)	Ceiling Area :-	Providing and applying cement plaster up to 6mm thick in CM 1:3 with sponge finish on all interior areas and surfaces with erection of scaffolding in all positions including all moldings, grooves, cornices, choppers, fixing of wire mesh over joint of beam & brick work and curing all complete.		
5	WINDOWS (Fixed)	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitted and jointed mechanically wherever required including cleat angle. Aluminium snap beading for glazing / paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	Jindal/Hindalco and equivalent	
6	Doors and Fittings	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.	CenturyPly, Greenply, Duro Door and equivalents	
i)		Architectural door hardware	Godrej, doorset, dormakaba and equivalent	
7	FLOORING WORK/DADO WORK/BASIN COUNTER/JAMB WORK	Polished Granite stone flooring using 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement		
i)		Granite stone of size 18 mm thick on Porch, stairs and ramp including skirting		
ii)		Vitrified tiles in different sizes fixing using cement based high polymer modified quick set tile adhesive		
iii)		600X1200X10 for toilet walls	KAJARIA, SPARTEX, JOHNSONS, NAVEEN, SOMANI, BAJAJ, and Equivalent	KAJARIA-SEILO MARFIL
iv)		600X1200X10 for toilet Floors Matt		
v)		Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling/grouting and finishing complete as per direction of Engineer-in-charge.	MYK (LATAPOXY), Pidilite (Roff), Weber, and Kajaria Gresbond and equivalent	
vi)		polished granite stone slabs up to 18 mm thick for 600 mm width for basin counter platform with		
vii)		rounding, nosing on a bed of 25 mm thick cement mortar 1:4		
viii)		Granite stone up to 16 to 18mm thick of window jambs frame top, bottom and sides. The marble jamb shall be fixed with stone adhesive/white cement		
ix)		Granite stone up to 16 to 18mm thick of door jambs frame top, and sides. The marble jamb shall be fixed with stone adhesive/white cement		
8	PAINTING			
i)	Putty :-	Providing and applying white cement based putty (of approved brand) in 2 coats on all internal/external plaster surfaces and ceiling surface to be painted	JK, WALCARE, BIRLA, and equivalent	
ii)	Interior Paint :-	Acrylic paint of all shades to give an even shade including all scaffolding and applying two or more coats.	SHALIMAR, ASIAN, BERGER, NAROLAC, DULUX and equivalent	asian-L146, narolac-2953P

S.No	Item	Description	Recommended Make / Approved Material	Remarks
iii)	External Area :-	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/ 10 sqm. over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm).	SHALIMAR,ASIAN,BERGER,NEROLAC, DULUX and equivalent	asian coral treasure-0975, nerolac mission beige-2078P
9	WATER PROOFING	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:		
9		(a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.		
		(b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.		
		(c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge.		
		(d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.		
		(e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test."All above operations to be done in order and as directed and specified by the Engineer-in-Charge."		
		With average thickness of 120 mm and minimum thickness at kharra as 65 mm.	Pidilite/Sika/Fosroc and equivalent	
10	Front Projection Façade Work	1) Providing and fixing on site ene laser cut grill made of 3mm/4mm ACP sheeting dark grey color with back support frame of aluminium pipes 2) Covering Common Area/Ramp/Steps with polycarbonate 3 mm with ms pipe grid , aluminium strip joint caps and epdm rubber with front elevation of ACP CNC	Granite- Chime Pink/Onida Orange/Colonbo juparana granite. ACP- Alstone-AN/506, Aludecor EC-02 Tuscan Clay (Make list/Color Palette for Granite and ACP Sheet enclosed)	Right Side and Left Side Elevation with Granite Cladding and Front Side Elevation with ACP material along with granite cladding, as specified in the drawing.
i)		Stone work (machine cut edges) for wall lining etc. (veneer work) upto 10 metre height, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade : (To be secured to the backing and the sides by means of cramps and pins which shall be paid for separately) :		
ii)		Granite stone - Exposed face machine cut and table rubbed with rough backing : 18 mm thick granite		
11	RAILING WORK/SS Fixtures	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/e fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc. , of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).		
12	WC Cubical	Thickness of Compact Laminate : 12mm Color of HPL Boards: Single Standard Compact Color Special Remarks For Customization : : Size of Cubicle : 1100mm (W) X 1300mm (D) X 2003mm (H). Door Size : 1750mm (H) x 600mm (W) Divider Size : 1820mm (H) Overall Height Of Cubicle : 2003mm (Including bottom Gap of 150mm) Accessories: Standard - Merino Make Aluminum, Stainless Steel - 304 Grade accessories) a) Aluminum "U" Channel b) Aluminum "F" Channel (Only Corner Unit)d) Aluminum Top Rail e) SS Coat Hook f) SS Privacy Thumb turn c/w Occupancy Indicator g) SS Door Knob h) SS Spring Loaded Butt Hinges with Cover i) SS Adjustable Foot 316 Grade k) Screws & Wall Plugs SPECIAL NOTE - Warpage Criteria is 3.0 mm/1000mm for MRS panels as per EN standard- 438	Merino,century,greenlam and equivalent	
13	Urinal Modesty Panels	Providing & Fixing in position urinal partition made of standard merino HPL board with all fixtures and fittings complete as per direction of engineer in charge	Merino,century,greenlam and equivalent	
14	Water Supply pipe	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.	Supreme/Prince/Finolex/Oriplast and equivalent	
15	Drain pipe	Providing and fixing uPVC P/S trap (Type-B, IS:13592) of self cleansing design with or without vent arm complete, including cost of cutting and making good the walls and floors. 110mm outer dia inlet and 110 mm outer dia outlet UPVC as per IS:13592	Supreme/Prince/Finolex/Oriplast and equivalent	
16	WC	Providing and Fixing of vitreous china single trap syphonic pattern having back inlet, supporting chair wall hung water closet with flush valve and CP brass flush bend (European type) Wall Hung water closet with seat and lid, with C.P. brass hinges and rubber buffers, adapter, rubber joints fixed to W.C., C.P. brass screwed washers including cutting and making good the walls and floors wherever required and HDPE wc pan connector including jointing with white cement complete in all respects.)	CERA, Hindware, Parryware ,Jaquar and equivalent	Jaquar-ONS-WHT-10953B1UFSM, CERA-cat.no-S1044142

102

S.No	Item	Description	Recommended Make / Approved Material	Remarks
17	WB	Providing and fixing white color vitreous China flat back, counter Top wash basin with R.S. or CI bracket and 32 mm dia outlet, with brass C.P. wall cap and extension pieces, 15 mm dia C.P. brass angle stop cock with 10mm dia C.P. brass connection pipe etc. CP brass chain, CP wall flange, rubber adaptor for waste connection complete, CP brass chain CP waste and CP pipe to wall with CP wall flange and rubber adaptor for waste connection complete, with pedestal of matching model below wash basin, including cutting and making good the walls wherever required.	CERA, Hindware, Parryware, Jaquar and equivalent	Jaquar-JDS-WHM-25911, cera-cat no.-S2020172
18	URINAL	Providing and fixing fully automatic urinal pot with fixing accessories complete as per direction of Engineer-in-Charge.	CERA, Hindware, Parryware, Jaquar and equivalent	
19	CISTERN TANK	Providing and Fixing of low noise Concealed cistern, mounting module for brick work with actuation plate with water saving: delayed filling process saves appr. 0.5 l/flush; Dual Flush - 3 litre and 6 Litre	CERA, Hindware, Parryware, Jaquar and equivalent	
20	Wash Basin Mixture	Providing and fixing of self-closing wash basin tap high pressure cold and pre-mixed water with a plastic cartridge; manual actuation and automatic closing action should Comprises: mounting accessories for single-hole installation and with technical data: as flow volume 6.0 l/min	CERA, Hindware, Parryware, Jaquar and equivalent	CERA-F1005453, Jaquar-OPP-15005BPM
21	Bottle Trap	Providing and fixing CP Bottle Trap for basin, sink and urinal.	CERA, Hindware, Parryware, Jaquar and equivalent	Jaquar-ALD-769250X190
22	Health Spary	Providing and fixing of ABS health spary which can tolerate water pressure up to 6 bar flow pressure with metal hose and holder in Polished Chrome;	CERA, Hindware, Parryware, Jaquar and equivalent	
23	PVC Water Tank	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI :12701 marked with cover and suitable locking arrangement and making necessary holes for inlet,outlet and overflow pipes but without fittings and the base support for tank	Sintex/Reno/Aquatech and equivalent	
24	Hand Drier	Supply, installation, testing of stainless steel fully automatic "No Touch" hand drier suitable to operate on 220 volts, single phase 50 Hz, A.C. power.	Dolphy, Euronics, Jaquar, and Dyson and equivalent	
25	Mirror	providing and fixing 900 mm wide beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	MODI FLOAT GLASS/SAINT GOBEIN, Equivalent	
26	HIS/HER TOILET Signages	Door and/or Directional Signages (Sizes between 225mmx150mm till 600mmx600mm) : Design, Supply of Acrylic multilingual Braille Tactile signages - like Building entrance, Door signages, Name plates, (raised domes) signboards of minimum size 9"x6" (225x150mm) to for doors, specific areas like toilets, water, etc. & directions (without maps or drawings), designed as per the drawings issued and having 3+2mm thick blue Acrylic non glare base plate, and 0.5mm Thick Aluminium plate at backside, with Upper Case San Serif words made of white acrylic non glare cut out letters of height 15mm raised 0.8mm above base plate and the equivalent word/s written in Hindi with Devnagri non glare acrylic letters of height 15mm raised 0.8mm above base plate. Signage to have a relevant symbol made of white cut out acrylic and raised by 0.8mm above base plate. Grade 1 Braille consisting of raised domes of 1.5 to 1.6mm dia. and spacing as per Braille standards given by GOI to be integral with the sign face and be raised 0.6 to 0.9mm above base plate. Each signboard to be fixed as per manufacturers specifications at the specified locations at a height of 1200mm from FFL and up to the satisfaction of the engineer in charge.		
27	Door Braille Signages	uilding Tactile Door Braille Signages, Providing of Stainless Steel Multilingual Braille Tactile signages "9 X 6" Inches having 1mm non glare matt finish Stainless Steel sheet + 4mm thick acrylic base plate on back side with Upper Case San Serif words made of black acrylic non glare cut out letters of height 15mm raised 0.8mm above base plate and the equivalent word/s written in Hindi with Devnagri non glare acrylic letters of height 15mm raised 0.8mm above base plate. Grade 1/2 Braille consisting of raised domes of 1.5 to 1.6mm dia. and spacing as per Braille standards given by GOI to be integral with the sign face and be raised 0.6 to 0.9mm above base plate. Each signboard to be fixed as per manufacturers specifications at the specified locations at a height of 1200mm from FFL and up to the satisfaction of the engineer in charge.		
28	SWINGING GRAB BAR	Providing S.S. 304 SWINGING GRAB BAR - 750 mm, and of DIA: 32MM, Brush/Matt finished, with safety locking system for preventing accidental falling down, MAKE :Prosafe Living and to be installed on the rear wall of the WC, at the specified location as per accessibility standards and to be installed firmly as per the installation instructions of the product issued by the manufacturer and using the specified hardware and as per the direction of the engineer in charge.		
29	GRAB BAR	Providing S.S. 304 GRAB BAR - 600 mm, and of DIA: 32MM, Brush/matt finished MAKE :Prosafe Living and to be installed on the rear wall, at the specified location as per accessibility standards and to be installed firmly as per the installation instructions of the product issued by the manufacturer and using the specified hardware and as per the direction of the engineer in charge.		
30	WC	Providing and fixing of white vitreous china European raised seat water closet for handicap toilet including providing & fixing CP bolts, nuts, fisher/anchor bolt are required for hangong of WC, exposed low volume compatible dual flush chinaware cistern with CP bolts, nuts, supporting arrangements, bakelite/ poly propylene seat & cover with CP hinges & rubber buffers, WC pan connector (straight/offset type Macfit single body push fit type WC pan connector with factory supplied spring loaded seal guard with integral single mould sealing fins made of flexible EVA body, including bush/adaptor for use with C.I./PP/uPVC Pipe as supplied with the pan connector), wall mounted 32 mm dia seamless stainless steel tube coated with nylon non-slip gripping surface hinged Hand Rail 750 x 100 mm complete with all accessories. Including cutting & making good the walls & floors wherever required.	CERA, Hindware, Parryware, Jaquar and equivalent	JAQUAR-DIS-WHT-93955P180UF

S.No	Item	Description	Recommended Make / Approved Material	Remarks
31	SANITRY and PLUMBING WORK	Sanitary plumbing, water supply including cold water line, rain water disposal, sewage work (disposal and treatment using modular STP of suitable capacity), toilet fittings (using CP fittings and hidden flushing cistern, sensor based urinal cistern, Hand Dryer (automatic) and soap dispenser, Bottle trap and SS bin (one in each WC cuboidal and one bin in common area) (provision of cover and foot operated) etc. Sanitary Fittings (Counter sunk WHB/Wall Mounted WC/urinal (with 8mm thk toughened glass partitions) and Plumbing Pipes. Overhead tank shall be multi layered HDPE with thermal insulation fitted with automatic pressure pump fittings in the toilet. Automatic Air Freshener spray shall also be provisioned in each block (Gents/ladies/handicap/feeding room).		
32	FEEDING ROOM/Baby Care Room	Nursing counters (baby friendly surface) no sharp edges and hard corners, equipped with WHB, mirror and disposal bin, facilities for changing soggy diapers and seating arrangements		
33	Handicap Toilet	This toilet shall equipped with Toilet paper holder, Grab bar, Low-height washbasin, Wider door with no threshold and Lever-type fittings		
35	PVC Conduit	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required 25mm dia	BAJAJ, FINOLEX, AKG, KALINGA and equivalent	
36	Wiring	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required	polycab, finolex equivalent	
37	Earth Wire	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required	polycab, finolex equivalent	
38	GI box	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required	Havells, RR Kabel, and Kisaan or equivalent	
39	MCB distribution board	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	MDS/ Havells/ Indo Asian/ Hager/MK SENTRY/ABB or equivalent	
40	SPLIT AC IN BABYCARE ROOM	Air conditioning work to include Supply, Installation, Testing and Commissioning of outdoor & indoor units. The outdoor units to be installed on M.S. frame fixed on outside. The refrigerant and condenset pipes with proper/ suitable insulation to be laid concealed/ surface with proper clamps, etc. Any expenses involved in clearance that may have to be taken & shall be included in the rate. The work includes all necessary civil, minor carpentry works.	HITACHI, CARRIER-AIRCON DAIKIN, VOLTAS, BLUESTAR or equivalent	
41	Solar Power Systems			
a	Rooftop Solar Panel	Provision of minimum 5 kWp capacity Hybrid rooftop Solar Photovoltaic (PV) system.	Rooftop Solar PV systems shall comply with applicable MNRE guidelines, CEA regulations, relevant BIS/IEC standards and local DISCOM requirements, as amended from time to time.	
b	Solar Street Lights	Supply and fixing of All In One Solar LED Street Light of required wattage (Lumen output not less than 10500 lumens) having following specifications- Solar Panel: 1. Solar panel should be made from Monocrystalline cells. 2. The Solar Module Power shall be ≥ 100 Wp. 3. Cell efficiency should be ≥ 21% . 4. Module efficiency should be ≥ 17% . 5. Glass should be Borosilicate only. 6. Manufacturer should comply to IEC 61215, IEC 61730 & IEC 61701 standards.	BAJAJ/ TRANSRAIL/VALMONT or equivalent	
42		Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.		
i)		Group A		
43		Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required		
i)		Group A		
44		Wiring of following light point with 1.5 sq.mm FRLS PVC insulated copper conductor cable in PVC conduit recessed including chasing of wall, filling of chases with cement mortar 1:3 max and /or fixing conduit on surface of wall/ceiling including fixing of saddles etc. including modular range of plate switches, modular cover plate, ceiling rose, surface or deep tee, circuit wiring (2x2.5+1x2.5), 1.5 sq.mm FRLS PVC insulated copper earth wire, etc. complete as required.		
i)		One point controlled by one number 10 Amp MCB (First point)		
ii)		Looping Point above		
45		Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.		
i)		2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire		
ii)		2 X 4 sq. mm + 1 X 4 sq. mm earth wire		
iii)		2 X 10 sq. mm + 1 X 6 sq. mm earth wire (Qty assumed from main panel)		
iv)		4 X 6 sq. mm + 2 X 6 sq. mm earth wire (Qty assumed from main panel)		
46		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required		
i)		25 mm		

S.No	Item	Description	Recommended Make / Approved Material	Remarks
47		Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.		
48		Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.		
49		Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/ Isolator)		
i)		6 way (4 + 12), Double door		
50		Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
i)		40 amps		
51		Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
i)		40 amps		
52		Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
i)		Single pole		
53		Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.		
54		SITC OF 9 W LED 6500 K Slim, compact, aluminum die cast edge lit panel Recess mounted round fixture with opal diffuser and separate electronic driver.	Havells or equivalent	
i)		SITC of 5 W WH LED Mirror Light		
ii)		Supply installation testing commissioning of 10W Wall bracket light		
iii)		Supply installation testing commissioning of Exhaust Fan Heavy Duty		
iv)		Supply installation testing commissioning of 1200 MM Ceiling fan		
55		Supply, Installation, Testing & Commissioning of Network WDR 2MP IR Bullet Camera having 1/2.8" 2 Megapixel progressive CMOS, 2.7 mm - 13.5 mm MFZ Lens, True day/night (IR-cut filter), Wide dynamic range up to 120 dB, Low light performance down to 0.002 Lux / F1.5 (color, 30IRE), 0 Lux (IR ON), Up to 197 ft (60 m) IR illumination, H.264/H.264B/H.265/Smart Codec/MPEG (Sub Stream), Support up to Up to 128 GB micro SDHC card, Class 10 (not included), DC12V or PoE (802.3af)(Class 0), IP67 INGRESS PROTECTION, ONVIF Profile S/G/Q, FCC Part 15B, EN 55032, EN 50130-4, UL 60950-1, ROHS- EN 62368-1, certifications, etc as required.	HONEYWELL/CP PLUS/HIKVISION or equivalent	
56		Supply, Installation, Testing, Commissioning, Integration of 8-Channel 4K NVRs:- Third-party network cameras supported Up to 5 Megapixels resolution recording With 2 SATA Port up to 12 TB Supported Support 1-ch HDMI, 1-ch VGA, HMDI at up to 4K(3840x2160) resolution 4-ch network cameras can be connected with 40M/60M/80M incoming bandwidth Support dual-os to ensure high reliability of system running Support various VCA detection alarm and VCA search Support H.265/H.264/MPEG4 video formats		
57		Supply, installation, testing and commissioning of 4TB Surveillance Hard Disk S V SERIES-offer high capacities, durable reliability and performance tuned to the high-write workloads of today's 24x7 video surveillance systems as required	SEAGATE/WD/HITACHI or equivalent	
58		Supplying, Laying & fixing of 15 MTR HDMI cable on surface as reqd.	Stackline/Extron/Kramer or equivalent	
59		Supply, installation, testing and commissioning of 3 KVA UPS with 30 minutes back-up with inbuilt battery complete etc as required.	APC/MICTOTEK/VGUARD) or equivalent	
60		Supply, installation, testing and commissioning of 32" LED monitor includes Screen size 43" Diagonal Size, LED BLU type technology, resolution- 3840 X 2160, 250 nits brightness, 4700:1 contrast ratio, stereo mini jack, HDMI 1/p-2, USB-1, compatibility for wifi, bluetooth suitable for operation on AC Power supply AC 240 V~ (+/- 10 %), 50/60 Hz, etc required.	SAMSUNG, Model - BE 43TH/SONY/LG or equivalent	
i)		Supply, Installation, Testing, Commissioning, Integration of 8+2 Giga uplink Port POE Switch 10/100/1000 MBPS (GIGABYTE)		
61	Drinking Water Cooler	Provision of stainless steel drinking water cooler with inbuilt purifier.	Capacity of drinking water cooler shall be selected based on expected user footfall/site requirements. Drinking water cooler shall conform to relevant BIS standards including IS 1475	
62	Signboards & Logo			
a	Letters	Provision of stainless steel letter signage displaying "National Highways Authority of India".	Dimensions, typography, colour scheme, illumination details and mounting arrangements shall be as per approved drawings.	
b	Monogram	Provision of LED illuminated glow signboard displaying Facilities with NHAI Monogram		

Note - All the equipment above shall be from reputed brand/make.

Make list for Granite and ACP Sheet

Description	Brand/name	Code(if applicable)	image
Granite(op-1)	Chima pink	-	
Granite(op-2)	Onida orange granite	-	
Granite(op-3)	Colombo juparana granite	-	
ACP sheet	Alstone	AN1506	
ACP sheet	Aludecor	Ec-02 Tuscan clay	