

## **Proposed Infrastructure Guidelines- Annexure A**

### **Gyan Shakti Residential Schools (GSRS) and Gyan Shakti Tribal Residential Schools (GSTRS)**

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**Gujarat Council for School Education, Samagra Shiksha  
Gandhinagar**

## **Infrastructure Guidelines Gyan Shakti Residential Schools (GSRS) and Gyan Shakti Tribal Residential Schools (GSTRS) Project**

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## **Infrastructure Guidelines for Gyan Shakti Residential Schools (GSRS) and Gyan Shakti Tribal Residential Schools (GSTRS)**

### **Preface**

The Gyan Shakti Residential Schools (GSRS) and Gyan Shakti Tribal Residential Schools (GSTRS) are being set-up with the objective of providing the highest quality of residential schooling and teaching and learning, free of cost to students enrolled in Government Schools across the State of Gujarat. These schools are expected to:

- Provide modern learning **infrastructure** (digital and physical), residential hostel facilities, sports & games facilities, arts, craft and vocational / skill training for holistic development of students.
- Provide the best **teaching methodologies**, higher order learning content, alternative medium of instruction etc. matching the best schools in the private sector.
- Deliver an **exclusive curriculum** developed by the Gujarat Secondary and Higher Secondary Education Board (GSHSEB), whose *objective will be to equip the students with higher order thinking, problem solving capabilities, learning by doing, value-based education, social and emotional skills, understanding of local culture, heritage and effective communication skills.*
- Emphasis on **acquiring Skills**: In line with the National Education Policy, 2020 these Schools will also focus on mainstreaming of skill acquisition. Particular focus will be on advanced 21st century skills which are technology driven, and this will equip the students for facing future challenges
- Emphasis on **extracurricular Activities**: There would be considerable emphasis on holistic development of a students' personality and nurturing of innate talents through extra-curricular activities like yoga, sports, games and arts. Separate teachers will be engaged by the Schools to train students according to their aptitude and choice.

The infrastructure for each GSRSs/GSTRSs needs to enable the educational vision and objectives as outlined above and therefore classrooms, academic and residential facilities have to meet a certain quality. To better understand the quality of infrastructure needed for this program, extensive consultations have been held with peers and educators along with visits to existing residential schools, both public and private.

Based on these observations and other standards, broad guidelines for each infrastructural aspect have been laid out. Optimization of infrastructure has been considered wherever feasible. These guidelines only set out the minimum requirements, and Schools are encouraged to go beyond wherever possible. Innovative architecture suited to the needs of an exclusive curriculum is strongly

encouraged. Schools with existing infrastructure are encouraged to make modifications and/or renovations to meet these guidelines.

With the objective of providing highest quality of schooling, teaching and learning to students enrolled in Government Schools across the state of Gujarat, the Education Department, Government of Gujarat is launching ‘**Mission Schools of Excellence**’ in the year 2021-22. One of the components of the Mission Schools of Excellence is to provide high-quality holistic education through **Residential Schools of Excellence (RSOE)**.

At present there are several models of residential schools like JawaharNavodayaVidyalaya, Eklavya Model Residential School and Kasturba Gandhi BalikaVidyalayas (KGBV) that exist in the state. From the large numbers of applications received for these schools every year against their limited vacancies, it is evident that there is considerable unmet need for Residential Schools in the state. To address this unmet need of high quality residential schools, the Education Department has decided to formulate a policy to encourage setting up of world class **Gyan Shakti Residential Schools** across the state on Public Private Partnership.

All capital investment towards establishing Gyan Shakti Residential Schools will be borne by the Project Partner. The Project Partner will bring their own land and investment on the entire civil and digital infrastructure required from time to time. They should set up state of the art civil infrastructure including school building, accommodation facility for students and teachers, spacious dining hall, indoor and outdoor sporting facilities, multipurpose activity room, auditorium and digital infrastructure like smart classrooms and computer labs.

Each campus would be of minimum capacity of 2000 students. Large campuses will help in optimal utilization of infrastructure and help in cross learning and peer learning between meritorious students from various districts. These campuses could be later developed into Special Education Zones as envisaged in the National Education Policy, 2020.

Private individuals and organizations with readiness to upgrade their existing infrastructure and facilities as per the design and specifications of Residential Schools of Excellence would be permitted to do so. A Committee of Technical Experts will audit such infrastructure facilities and certify that they are fulfilling the requirements specifications.

## **A. Land requirement**

Land has to be provided by The Project Partner and investment on the entire civil and digital infrastructure required with proper road connectivity. The Minimum requirement of land for different schools is given below:

A minimum of 10 acres of Land is required for establishing Gyan Shakti Residential School.

## **B. Infrastructure Facility requirement**

As teachers and children spend a substantial part of their day in school, it is essential to keep the school environment including building, premises, entrance and surroundings that comprise broader term 'Infrastructure' safe and secure.

It is important to see that school buildings are built to be more resilient to natural hazards and ensure "life safety". They also should be such that in the adverse situation should be able to shelter community.

In similar way, school administration, staff, teachers as well as students need to be better aware and prepared to respond to any catastrophe, natural or man-made, so that any damage - injury or loss of life and property - can be reduced, if not completely avoided.

School infrastructure includes many components viz., physical structures such as school building, playground, equipment on the playground, plants and trees/ garden, water bodies (if any), electrical and fire safety mechanisms, school transport etc.

The facilities in the school shall be compliant to the provision of the Right to Education Act, 2009 and other norms as prescribed by Central Board of Secondary Education (CBSE) and Navodaya Vidyalaya Samiti. However, facilities not limited to the following will be ensured and must satisfy the following conditions:

## **1. School Building**

The school building provides classrooms, laboratories, a computer room, a library, display areas, administrative and staff rooms. The entrance of the school building is given an attractive form. The entry extends onto a platform, which acts as a stage during assembly. The central courtyard acts as assembly ground.

The School should have suitable furniture in the class rooms commensurate with the strength of students and staff. The school should have the needed equipment and facilities as per the syllabus prescribed for Sciences, Home Science, Technical subjects Vocational subjects and various activities under work experience and art education etc.

### **1.1 Class Rooms**

The classroom embodies or holds an important part for the SVGSRSs/ GSTRSs. The classroom needs to be allowed for a range of interactions such as group work, discussions, debates and presentations that can all be conducted inside the classroom.

- a) Each section should have a maximum of 40 students per class. Schools are encouraged to have less than 40 students per section to allow for pedagogical excellence. If the schools can manage their schedule effectively, they may use the classrooms in double shift.
- b) Based on case studies and classrooms of the best models of learning, the classroom sizes need a minimum of 12 sq. ft. per student for grades 6-8 and a minimum of 14 sq. ft. per student for grades 9-12<sup>1</sup> (in a ratio of not less than 1:1.25 for the breadth and length of the classroom). GSRs/GSTRs are encouraged to build larger sized classrooms of 15-20 sq. ft. per student to facilitate the curriculum developed for the

GSRs/GSTRs. For smaller sized classrooms, it is advised to reduce the number of students /section to maintain the minimum area per student.

<sup>1</sup> All areas mentioned in sq. ft. in this document are mentioned as carpet areas (net area available for usage).

- c) Students will spend most of their learning hours in the classroom. The classroom has to be a space that is a joy to be in. This requires it to be uniformly well ventilated and naturally lit to the extent possible without creating conditions of glare and heat. In case of insufficient natural light and/or ventilation, the classroom should be provided with artificial lighting. There should be enough space for display of students' work inside and outside the classroom.
- d) The pedagogy requires the space of the classrooms to allow for reconfiguration of the furniture in shapes other than the standard rows and columns configuration such as U shape, clusters, concentric circles, pairs etc. This would mean that the table and the seating arrangement to be independent of each other allowing varied configurations as per the curricular requirements.
- e) Other than the display screen, there should be well illuminated multiple writing spaces for teachers. Arrangements for keeping student bags, teacher material and classroom resources should be planned and provided.
- f) The layout of the classrooms and the building should be designed keeping in mind reduction of disturbance due to sound.

## 1.2 Laboratories

Laboratories in school must be positioned as per the rules, as mentioned below. They should also have proper water supply, drainage, smoke and fire detectors. Lab should also substitute as a classroom. It should have furniture that is as per the requirements of the type of lab for the subject and should have Blackboards/ whiteboards/ and places designated for display of charts and other items. All labs should have a teacher area and lab technician's space for effective maintenance.

Well-equipped Composite Laboratory (all sciences) for Secondary grades and Separate for Higher Secondary grades (Physics, Chemistry and Biology).

Laboratory shall be including furniture, fixtures, fittings, circulation area (verandah). The space for free mobility for students in case of an emergency must be maintained.

Adequate storage spaces for all 5 types of labs

- a) Physics Laboratory
- b) Chemistry Laboratory
- c) Biology Laboratory
- d) Computer Laboratory
- e) ATAL tinkering Laboratory - Maker's Space

### 1.2.1 Science Laboratories

- a) Composite for Secondary or/and separate Physics, Chemistry and Biology for Senior Secondary.

- b) 2 Composite Laboratories and 3 Separate Laboratories will be set up. Minimum size of each Composite Laboratory will be 960 sq. feet and Minimum size of each Separate Laboratory will be 1040 sq. feet.

### **1.2.2 ATAL tinkering Laboratory**

- a) The School should have separate provision for ATAL tinkering Laboratory.
- b) Workshops to be in line with Atal Tinkering Lab requirements with facilities for robotics, metal / woodwork, electronics, automation etc.
- c) At least 2 large workshops will be set up. Minimum size of each workshop will be 1000 sq. feet for robotics, electronics and automation etc. and 1500 sq. feet for metal/ woodwork etc.

### **1.2.3 Computer Laboratory**

- a) Minimum size of computer laboratory should be 9 m x 6 m each (approx 600 sq ft.).
- b) All the classrooms and specialized facilities should have the ability to use digital media (audio and video). This may be achieved through a standard Smart Classroom and/or the usage of large screen televisions, projectors, audio equipment and a digital device (tablet, laptop or computer) connected to the internet.
- c) Students from Grades 6-8 should have access to tablets or laptops in a maximum of 1:4 device: student ratio. Grades 9-12 students should have access to a laptop in a 1:2 device: student ratio. This access may be provided in the form of a computer lab, digital learning labs, mobile carts with tablets or laptops etc. SWSVGSRSs are encouraged to provide as many more devices as possible for usage inside the classroom.
- d) Teachers may be provided or expected to bring their own laptop / other devices to be able to plan and deliver exclusive curriculum.
- e) All digital devices must have good quality internet connectivity. Through a firewall, cyber security should be ensured. While older students may be provided with digital devices in their hostels for study and project work, there should always be strict time control and with a full-fledged firewall.
- f) If the school is offering any subject related to computer science or IT at senior secondary level, it should have a separate laboratory with adequate provisions for the same. Also, this require hardware and software with certain specifications, access to such software or devices should be ensured (either through specialized computer labs or otherwise).
- g) The School should have a minimum of 20 computers and computer to student ratio of 1:20.
- h) There should be minimum one lab if the school strength of students in the school is up to 800. For every additional (up to) 800 students one more lab will be required.

## **1.3 Teacher's common Room**

- a) Teaching Staff Area Including Staff Common Room shall be 20 sq. feet per teacher for 60 percent teaching staff.

#### **1.4 Library**

- a) The minimum size of the library will be 2500 sq. feet. (not less than 1.1 sq. feet per student)
- b) The Library should have sufficient number of age appropriate books on all subjects in its stock.
- c) An inviting library with physical and e-Books- Fiction, Non-fiction, Reference Books, Encyclopedias, Periodicals, Magazines, Journals and Newspapers. etc in English, Gujarati, Hindi and other languages with sufficient space for students to study and research, individually and collaboratively (i.e. with a reading room facility) should be provided.
- d) The Library shall not contain any book or other forms of literature that espouse or propagate communal disharmony or casteism or discrimination based on religion, region or language etc. The school should not stock in the library any book disapproved by the Govt/Board.
- e) Physical display of books along with shelving should create a visually inviting space for students to explore, read and issue books. A dedicated workspace for the librarian and storage is also recommended. Additionally, schools may provide reading spaces and reference books in the hostels.

#### **1.5 Visual Arts**

- a) Specialized facilities should be created for as many art forms as feasible, such as drawing, painting, woodwork, sculpture, pottery etc.
- b) At least 2 large spaces of 1500 sq. feet each should be provided. These spaces should ideally be connected to the outdoors, to create an inspirational environment for students to learn and practice the art forms.

#### **1.6 Music Rooms**

- a) Specialized rooms for a range of instruments, as well as space and appropriate equipment for choir/group performances should be provided.
- b) At least two rooms of 1500 sq. feet should be provided. The space should be acoustically treated to enhance quality of practice as well as to reduce sound disturbance outside the room.

#### **1.7 Multipurpose halls / mini auditoriums/ Amphitheatre**

- a) Multipurpose halls / mini auditoriums to be used for performing arts (dance, drama, theatre etc.) as well as for student / staff gatherings / workshops. These will collectively be provided for at least 50% of the student strength at 7 sq. feet/ student.
- b) The space should be acoustically treated to enhance sound quality as well as to reduce sound disturbance outside the room.

#### **1.8 Office room (Principal & support staff)**

- a) Minimum area required for Principal's Office and and for Vice Principal's office shall be 200 sq. feet And 355 sq. feet respectively.
- b) Minimum area for general office and storage shall be 490 sq. feet and 700 sq. feet respectively.

### 1.9 Adequate toilets & drinking water facility

- a) The School will provide adequate facilities for potable drinking water on each floor.
- b) The School will provide clean healthy and hygienic toilets on each floor with washing facilities for boys and girls separately in proportion to the number of students. The toilets for the primary students should be separate from other toilets. There should be separate toilets for staff members. Signage boards should be displayed prominently on the toilets of all categories.
- c) Requisite number of toilet blocks in each school, separately for Boys, Girls, staffs & teachers and differently abled children adequate drinking water facilities in every school. Every school to have atleast one toilet which CWSN can access. In case as existing toilets can be converted to CWSN friendly toilet, funds for conversion maybe sought. Proper drainage system in every school.
- d) The School shall provide proper facilities like, ramps in toilets and at entry/exit points for wheelchair users and auditory signals in elevators/lifts in accordance with the provisions laid down in RPWD Act-2016.
- e) As per National Building Code of India 2016, Clause 4.2.5.1, Page-22, Following Sanitary fittings shall be ensure as described in following table-1.

**Table-1**

Sr. No.	Fixtures	Non-Residential		Residential	
		Boys	Girls	Boys	Girls
1	Water closets	1 per 40 pupils or part thereof	1 per 25 pupils or part thereof	1 per 8 pupils or part thereof	1 per 6 pupils or part thereof
2	Ablution tap	One in each water closet	One in each water closet	One in each water closet	One in each water closet
3	Urinals	1 per 20 pupils or part thereof	-	1 per 25 pupils or part thereof	-
4	Wash basins	1 per 60 pupils or part thereof	1 per 40 pupils or part thereof	1 per 8 pupils or part thereof	1 per 6 pupils or part thereof
5	Bath/showers	-	-	1 per 8 pupils or part thereof	1 per 6 pupils or part thereof
6	Drinking water fountain or taps	1 per 50 pupils or part thereof	1 per 50 pupils or part thereof	1 per 50 pupils or part thereof	1 per 50 pupils or part thereof
7	Cleaner's sink	Minimum 1 per each floor			

## 2. Hostel

The full strength of Gyan Shakti Residential School is 2000 students with hostel facility for all. In a residential school, the students are expected to learn living habits with self-sufficiency, discipline, dignity of labour and sharing attitude. Their living accommodation should, therefore, induce the right atmosphere besides providing natural light, ventilation, physical and visual spaciousness. The tropical climatic conditions in our country are an important consideration in the design of the hostel. The children do not face the space constraints in hostel. Neither a strong pattern alien to their life style is imposed on them. That is why the physical form of the hostel is kept simple but highly efficient from functional point of view.

- a) Dormitories - Boys (Capacity of minimum 1000)
- b) Dormitories - Girls (Capacity of minimum 1000)
- c) Adequate bathrooms, toilets & drinking water facility
- d) Infirmary/sick room
- e) Office room & residence of hostel warden
- f) Visitors room
- g) Reading / common room

The minimum area for each components mentioned above shall be as per Ministry of Human Resource Department's letter no. F.3-2/2010-Sch.I(GH), Dated 16-06-2011 for Construction and Planning of Hostel for Students. A reference is mentioned in below table for 100 bedded Girl's Hostel.

**Table-2**

Sr. No.	Items	No.	Area (Sq. ft.)	Area (Sq.mt.)	Total Area (Sq. ft.)	Total Area (Sq.mt.)
1	Construction of building (carpet area of the building should be approximately 60 sq.ft. per child for hostel with 100 children)	100	62.5	5.81	6250	580.64
2	(a) Bath rooms for general students	16	30	2.79	480	44.59
2	(b) W/C for general students	16	30	2.79	480	44.59
3	(c) Bath rooms with WC for differently abled students	1	45	4.18	45	4.18
3	Kitchen with store	2	500	46.45	1000	92.90
4	Dining Hall	2	500	46.45	1000	92.90
5	Wardens residence-cum-office	2	625	58.06	1250	116.13
6	Study Room	2	600	55.74	1200	111.48
7	Library	2	500	46.45	1000	92.90
8	Recreation room	2	300	27.87	600	55.74
9	Counseling and Guidance Room	2	120	11.15	240	22.30
10	Office Area	2	500	46.45	1000	92.90
11	Medical check-cum-visitor room	2	750	69.68	1500	139.35
	Sub Total				16045	1490.63
	Adding for 20% circulation area and 15% wall thickness			35%	5615.75	521.72

<b>Total</b>				<b>21660.75</b>	<b>2012.35</b>
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- h) Dining Hall-A spacious dining hall for 1000 students along with kitchen is provided where all students can take in two shift.
- i) In case bunk beds are being considered, sufficient clearance between any of the bunk bed levels and the next bunk bed level or with the ceiling or fan or the ceiling lights shall be maintained.
- j) Additional space should be provided in each hostel for common / recreation rooms, TV lounge, indoor games (chess, carrom, table tennis, Table Tennis), visitor rooms, warden room and office and any other common facilities.
- k) Reading facilities (tables and chairs) may be added within the room with additional area allotted beyond the above stated guidelines OR common spaces of the school such as dining halls, multipurpose rooms, library, classrooms, etc. may be used.
- l) Hostels for girls and boys must be separate.
- m) Sufficient bathrooms, toilets and washbasins must be available for the students with hot water facilities (which may be powered by solar water heaters).
- n) Each hostel should have residences for house parents or wardens. The ideal ratio of Warden: Students should be 1:75. However, the Schools may provide Wardens at least as per 1:100 ratio. Schools are encouraged to strive for more adults per student to ensure high quality of monitoring and mentoring. Each warden should have an office where students can house parents or wardens or any concerns. PA systems should be made available to the house parents or wardens for common announcements, emergency requirements etc.
- o) It is preferred that the dining hall is built contiguous to the hostels. Alternately, it may be built nearest possible to the hostels providing for lighting and safety on the connecting access paths.
- p) Recreation room(s) and meeting spaces should be made for students for viewing TV, indoor games such as Table Tennis, Carrom, Chess, Board games etc. Mini-libraries stocked with newspapers and magazines are also recommended.
- q) The layout for the hostels should allow for integration of controlled outdoor spaces such as courtyards that could allow play, congregation and performance spaces for the hostels.
- r) Provision should be made for security personnel to effectively manage all entrances and exits. CCTV should be provided at all entrances and exit points.
- s) Facilities and proper space for washing and drying of clothes should be provided in each hostel.

### 3. Residences

- a) The Principal and some senior staff members must be given appropriate residences on campus to ensure student wellbeing, discipline and safety.
- b) Other teachers and other staff may be offered residences on the campus.
- c) Principal residence-Principal's residence of size 186 sq.mt. (Type-V) & Vice Principal's residence of size 121 sq.mt. is placed at a vantage location in the layout of buildings for effective control.

- d) Staff Residences-Residences of minimum size of 80 sq.mt. for each teachers(Type-III)and each for Wardens.Also, Residence of minimum size of 70 sq.mt. each for administrative staff and supporting staff(Type-II). Guest House of plinth Area 80 sq.mt. shall be also constructed in the Campus.

#### 4. Dining hall and kitchen

- Each dining hall including a hand wash area, must have at least 10 sq. ft. per person per eating batch with no more than 2 eating batches/ shifts.
- The kitchen, storage space for utensils and all provisions, utensil washing space, gas bank etc. should be separate as per the management requirements based on the equipment and manpower required to serve the student and staff capacity. The gas bank should be secured and located in a well-ventilated area as per norms for such facilities.

#### 5. Guidelines for Sports facilities

- With an objective of providing holistic education, sports facilities are not only important for regular physical activity and recreation but also for identifying and nurturing sporting talent competitively.
- An integrated sports complex, specifically for football and athletics is encouraged allowing for maximum usage of the area. The sports may be chosen such that maximum participation and physical activity can be ensured while optimizing the usage of land. The following facilities are recommended (an approximate size not including the margins is given):

**Table-3 Recommended Sports facilities**

Facility with minimum size (margins not included in sizes given)	Minimum number of facilities required
Football fields	1
Volleyball courts	4
Basketball courts	2
Kho-kho	2
Kabaddi Courts	2
Athletics facilities for both track and field including a 400 m track, a 100 m straight track, long jump, high jump, shot put, discus throw areas etc.	1
Multi-purpose indoor sports complex for yoga, gymnastics, 2 Badminton courts, 4 table tennis tables etc. with sufficient height	1

- The total area required for the outdoor facilities above is about 20,000 sq. m. (or about 5 acres). All built-up facilities and circulation spaces are to be accommodated in the remaining area. For each of these facilities, schools are required to have high quality equipment and facilities which includes the following requirements:
  - All fields should have well maintained green grass or artificial turf

- All equipment and field / court sizes should be of approved national / international standards
- Equipment should be made available to students in sufficient quantity and quality.

## 6. Common Facilities

- a) Compound Wall, Entry Gates, Covered Paths, drainage – sewage, water tanks etc
- b) Circulation area @ 25% of total plinth area

## 7. Other essential infrastructure facilities & requirements

### 7.2 Essential Infrastructure blocks

A brief description of other essential facilities in line with the vision for the SVGSRSs are given below:

- Administrative block: Front desk for visitors and students, counselling rooms, offices for the academic leadership team as well as the operations in-charges, and staff rooms with workstations for others, as well as meeting rooms for staff and student, stores for all supplies. This block may be integrated with the classroom block for smooth operations.
- Green School: Schools are encouraged to adopt sustainable practices both in their infrastructure development and maintenance. The quality of the built-up infrastructure should be well designed such that it's structurally efficient and reduces the use of artificial lighting and ventilation. The quality of detailing should be robust to allow for ease of use, reduce maintenance and wastage (for e.g. stainless steel basins, low flow taps). Each GSRS campus should have as much greenery as possible apart from the playing fields. Further, SVGSRSs are encouraged to adopt as many practices from the resource book: "Towards a Green School by NCERT (2015)."
- Water Management: Rainwater recharging / harvesting is strongly encouraged. Water should be procured through sustainable practices, treated as per requirement of consumption and treated wastewater should be used in landscape development.
- Waste management system: Waste should be segregated at source through intelligent piping and systems. All types of waste should be treated or recycled as per well-accepted green norms.
- Energy infrastructure: To meet the requirements; solar panels, biogas plants, wind panels etc. will be encouraged. SWSVGSRSs are encouraged to maximize the usage of natural light and air across the school campus to minimize power dependency during daytime.
- IT infrastructure: IT hardware and network infrastructure with internet connectivity for the computer labs, WiFi access for staff within the educational blocks (in line with the requirements of Digital Infrastructure above).
- Medical Facilities: A medical infirmary with necessary equipment and nurse(s) to ensure first-aid and emergency care is recommended. Doctor(s) may be part-time or there may be a tie-up with a nearby hospital depending on the location of the GSRS.

- Security: A Boundary wall and gate with security checkpoints, a CCTV network and monitoring station that will cover the whole campus along with well-lit paths through the school campus shall be required.
- Safety: All safety provisions to be provided for students including fire safety and applicable government regulations and norms.
- Rainwater harvesting in all buildings, mosquito nets on doors and windows, lighting in common areas, solar water heating/ lighting, landscaping of common areas, kitchen garden, compost pits, etc.
- All furnishings:
  - School: Desk, Bench, Lab Equipment, Computers, Sports materials etc.
  - Hostel: Individual Bed, Rack for storing personal belongings, Study Table and Chair Dining: Kitchen and dining utensils. All other furnishings as required.
  - Services: These include Electric substation, underground sump of 1.00 lac ltrs. Capacity, roads internal & pathways, sewerage, water supply, storm water drain.

### 7.3 Infrastructure to enhance educational experience

The GSRS shall modify or add to the building learning elements to enhance the educational experience of the students. The whole campus including outdoor spaces, corridors, academic and residential blocks should be a learning experience for the students. Here are some ideas that may be implemented:

- Open air theatre: For large assemblies and outdoor performances.
- Corridors, Walls as learning spaces: Quotes, Happenings, interactive elements can be placed throughout the school in these spaces.
- Building as Learning Aid (BaLA): The ideas which are relevant for all Grades 6-12 from BaLA perspective should be implemented.
- Science installations: Science installations and mechanisms that demonstrate the working of various scientific principles such as friction, motion, sound, optics, mechanics, gravity, composting can be placed across the school campus such that students may interact with them.
- Outdoor spaces and gardens as environmental learning: Apart from being a green campus, there should be various learning experiences built into the campus. For e.g. there should be a large variety of trees, shrubs, vegetables, herbs planted across the campus. Species should be labelled with a description. Further, there should be scheduled opportunities for students to participate in the upkeep of all the green spaces including planting, weeding, watering, plucking / harvesting. A system of managing organic and wet waste should be in place including composting and conversion to manure whereby students can see best environmental practices on a regular basis.

### 7.4 Essential requirements to be met across the campus

- Light and ventilation: All built spaces should be uniformly well ventilated and naturally lit to the extent possible without creating conditions of glare and heat. Only in case of insufficient natural light and/or ventilation, the spaces should be provided with artificial systems.

- Storage: Adequate provision for varied storage requirements as per the activities and resources should be provided within each facility.
- Auditory requirements: The design of the built spaces should help in even dissipation of sound to create a comfortable auditory environment.
- Potable Water: The School shall provide adequate facilities for potable drinking water on each floor and across the campus.
- Toilets: The School should provide clean hygienic toilets with proper light and ventilation on each floor with washing facilities for boys and girls separately in proportion to the number of students. Robust detailing of toilet fixtures and doors should ensure ease of use and maintenance. Toilets for universal access should also be provided. Signage Boards should be displayed prominently on all toilets.
- Ramps: The School shall provide proper facilities like, ramps at entry/exit or other points for wheelchair users and auditory signals in elevators/lifts (wherever installed) in accordance with the provisions laid down in RPWD Act- 2016.
- Outdoor furniture: Suitable outdoor furniture should be provided to enable student interactions, congregations and community activity across the school campus.
- Equipment: The school should have the needed equipment and facilities as per the syllabus prescribed for Sciences, Mathematics, Computer Science, Technical subjects, Vocational subjects and various extra activities.
- Campus Map and Signage: Wayfinding maps should be prominently displayed across the campus with the relevant signage.

## **C. General and Safety requirement**

### **1. School Building**

Many guidelines suggest steps to keep school building safe for children.

- a) Building needs to be certified by the local government authorities as a safe for housing the students and other members involved in the schooling .The school buildings shall preferably constructed with RCC frame/brick/stone masonry walls with RCC roofing. Where it is not possible to provide RCC roofing only non-combustible fireproof heat resistance materials should be used.
- b) It is recommended middle school children should be housed on the ground floor and the maximum number of floors in school buildings shall be restricted to four including the ground floor.
- c) The School building shall be free from inflammable and toxic materials, use of wires and fitting should be such that it reflects standard safety norms. Any material that could harmful, toxic, flammable and if required for labs or any other work, should be stored away from the school building. There should a separate store and log book for safety of these items.
- d) The staircases, which act as exits or escape routes, shall adhere to provisions specified in the National Building Code of India 2016 to ensure quick evacuation of children. There should signboards that indicates escape paths and assembly points in the event of unforeseen situations.

- e) The orientation of the buildings shall be in such a way that proper air circulation and lighting is available with open space all-round the building as far as possible.
- f) Existing school buildings shall be provided with additional doors in the main entrances as well as the class rooms if required.
- g) The size of the main exit of the school be such that it helps smooth transit and classroom doors shall be large enough for ease of movement in any situation not just emergencies.
- h) School buildings have to be insured against fire and natural calamities with Group Insurance of school pupils.
- i) Kitchen and other activities involving use of fire shall be carried out in a secure and safe location away from the main school building.
- j) All schools shall have water storage tanks, duly covered and protected.
- k) CCTV in schools needs to be monitored and maintained regularly.

## **2. Laboratory**

- a) The chemicals and instruments must be kept safely beyond the easy access of children and should be used only under supervision.
- b) A first aid box must be made available in the lab.
- c) There should be an exhaust facility for the gases.
- d) The school team must be trained to meet any emergency in the laboratory.

## **3. Kitchen**

Kitchen is the reflection of health and hygiene of the school. Kitchen should be away from the teaching or residential areas

- a) The Kitchen cum Store should be located in a clean and open place and free from filthy surroundings and should maintain overall hygienic environment.
- b) The premises should be clean, adequately lighted and ventilated and have sufficient free space for movement. It should have facilities that reflect world class hygiene and spaces for food storage, utensils, cleaning spaces, and areas that are free from any clutter.
- c) Floors, ceilings and walls must be maintained in a sound condition. They should be smooth and easy to clean with no flaking paint or plaster.
- d) The floor and skirted walls should be washed as per requirement with an effective disinfectant. The premises should be kept free from all insects. No spraying should be done during the cooking of Meals, but instead fly swats/ flaps should be used to kill flies getting into the premises.
- e) Windows, doors and other openings should be fitted with net or screen, as appropriate to make the premise insect free.
- f) The water used in the cooking shall be potable.
- g) Continuous supply of potable water should be ensured in the premises. In case of intermittent water supply, adequate storage arrangement for water used in food or washing should be made.
- h) Arrangements for cleaning of containers, tables, working parts of machinery, etc. should be provided.

- i) All utensils should be kept clean, washed, dried and stored at the Kitchen cum store to ensure freedom from growth of mold/ fungi and infestation.
- j) All utensils should be placed well away from the walls to allow proper inspection.
- k) There should be efficient drainage system and there should be adequate provisions for disposal of refuse.
- l) Potential sources of contamination like garbage, food waste, rubbish, waste water, toilet facilities, open drains and possibilities of insects, of stray animals entering kitchen areas should be ensured.
- m) Kitchen should be separate from classrooms, preferably located at a safe, but accessible distance.
- n) Floors should be sloped appropriately to facilitate drainage and the drainage should flow in a direction opposite to the direction of food preparation. Adequate control measures should be in place to prevent insects and rodents from entering the processing area from drains.
- o) Windows, doors & all other openings to outside environment should preferably be covered with wire-mesh or insect proof screen as applicable to protect the premise from flies and other insects / pests / animals.
- p) Ventilation systems natural and /or mechanical including air filters, exhaust fans, wherever required, should be designed and constructed so that air does not flow from contaminated areas to clean areas.
- q) A display board mentioning do's & don'ts for the staff and students should be put up inside at a prominent place in the premise in local language for everyone's understanding.
- r) Properly constructed chimneys are required in the kitchens. Chimneys should not be the entry point of insects; reptile's etc.
- s) Fuel (kerosene/fuel wood/ charcoal/LPG) should be stored/installed safely, so that there is no fire hazard. Smokeless chulhas should be used to the extent possible.
- t) The Kitchen should have full visibility with sunlight or artificial light.
- u) If kerosene/LPG or Piped gas is used for cooking, the staff should be specifically trained in safe handling of stoves, gas cylinders, etc.
- v) Raised platform for cooking, and storing food should be part of the kitchen.
- w) The dustbin should have a lid and should be always covered.

The Right to Free and Compulsory Education (RTE) Act 2009 provide the legal framework for the quality education in India and mandates minimum norms and standards for infrastructure in schools including kitchen cum store.

#### **4. Toilets**

Many documents including RTE Act, 2009 and MHRD circular to the States talk specifically about toilet standards to be maintained in schools.

- a) Toilets must be located within the school premises in both educational and residential areas.
- b) There must be separate toilets for girls and boys with adequate supply of water and these blocks should be clean and hygienic for usage

- c) Separate toilets for children, staff, support staff and visitors with adequate supply of water and these blocks should be clean and hygienic for usage.
- d) There must be separate toilets for visitors in administrative blocks of the school building.
- e) Every school needs to maintain number of toilets as per prescribed norms (according to affiliation by laws of respective board)
- f) Toilets must be kept open for the use by children
- g) Separate toilets, as per the norms, must be available/ accessible for children with disabilities.
- h) All the toilets need to have running water facility and if possible grey water harvesting should be ensured by the school.
- i) Availability of soaps etc. for washing hands-should be ensured by the school.
- j) All the toilets must have doors for ensuring safety and privacy of children irrespective of age/ gender and place of the toilet blocks.
- k) The school needs to have clean and working method of disposing waste materials, especially for girls. Girls' washrooms should have a separate hygiene manual and have incineration units fixed in each.
- l) Toilets must be cleaned on daily basis and there should be a chart for record of the same.

## 5. Drinking Water

Guidelines by CBSE, MHRD circulars and Navodaya School highlight the importance of provision of clean drinking water in schools. Schools to ensure that there is NO water spillage/ leakage or any other contamination to potable water. Taps for water should be checked on regular basis for any leakage/wastage.

- a) Safe and adequate drinking water should be made available to the children within the school premises at all times.
- b) Based on the quality of the water, Aqua guard/ RO systems should be installed in the school
- c) Water should be available near the sports ground also.
- d) Safety/quality of water must be checked on regular basis by the concerned authority.
- e) Water should be tested of its potability and the reports from the labs should be maintained for water to be safe at all times.
- f) Water tanks (for drinking water, for toilet blocks and for kitchen) should be cleaned from time to time. ( advised every 3 months)
- g) If rain water is harvested at the school, tanks should be clean and system to clean the tanks must be ensured.

## 6. Electrical System and Safety

Several guidelines point out the importance of electric safety measures that need to be ensured in schools. With advent of 21<sup>st</sup> century skills it is critical that all classrooms

should have electrical fitting, for computers, projectors, and sound systems or in labs from gas burners to other electrical fittings.

- a) All the electrical systems in school must be checked periodically.
- b) Ensured limited access to the area of electrical installation only to those who are required.
- c) The electric wiring and points are mostly fire resistant or fire proof.
- d) There should be NO uncovered live wires in any areas in the school, be it classroom, lab or residential block or the hostel room or medical room for children.
- e) The electrical distribution boxes should be locked and the keys should be kept only under the custody of electrician or the person in charge.
- f) Immediate necessary measures should be taken to repair the loose wiring/connections or any damage to any electrical fitting in the class.
- g) In case of any such need electric gadgets should be handled by responsible employee of the School.
- h) Students should be inducted to fire safety, electrical safety and be aware of the system to report if any things is not as per the standard norms, including not touching to poles, boards, wires etc.

## **7. Fire Safety Management**

Fire Safety is another important safety aspect covered under many guidelines.

- a) Every school must have a fire safety certificate, which must be validated periodically by concerned authority
- b) School must have fire fighting systems in place to meet any emergency, including the alarm system or smoke detection system.
- c) With the help of firefighting agencies mock drill and training must be carried out in each school on periodical basis and students must be trained for evacuations.
- d) Trained management team should be available in the school for initial fire hazard management.
- e) The School must put on display the Fire Safety and Evacuation Plan to be followed in case of emergency.
- f) There should be a visible sign board for fire assembly point for everyone

## **8. Earthquake Management (other natural hazards)**

National Disaster Management Authority (NDMA) has come out with specifications for schools prone to various natural calamities. If schools are situated in the earthquake risk zone, following steps must be taken

- a) Necessary steps must be taken during construction of the building for earthquake safety
- b) If required, school must modify structure in consultation with local authorities.

- c) A trained disaster management group should be available in school for initial response.
- d) School must maintain a contact with the local disaster management authorities for training and retraining
- e) The School must put on display the Earth Quake Management & Evacuation Plan to be followed in case of emergency.

## 9. Playground

Playground is the new 21<sup>st</sup> century classroom. It is evident and research has proven that a lot more skills are mastered on playground than in classroom. NEP 2020 also describes classroom as learning space, space for health and fitness and collaboration and for life skills.

RTE Act recognizes play ground as a mandatory part of school infrastructure, in view of the physical well-being of the students. It says as follow.

- a) The school should have a playground.
- b) The playground should be maintained properly.
- c) The equipment's on ground must be maintained for safety and security.
- d) Children must get the games/ sports materials to play on daily basis and this should grade/ age appropriate.
- e) The schools that are providing specific sports or physical activity need to provide proper facilities, trained staff and necessary equipment and materials, with respect to each of them and also need to adhere to the respective guidelines.

## 10. Minimum Standards for Safety related to Sports

Guidelines developed with SAI and NIMHANS has suggested minimum standards for the safety of children in schools w.r.t to sports facilities:

- a) Provision of adequate medical facilities in schools is required. In case of female trainees, provision of lady doctor/ lady nurse should be made. Tie up with local reputed hospitals / empanelled hospitals for catering to the medical emergencies of trainees.
- b) Adequate and sufficient food/refreshment facilities for children while they participate in sports, as per norms fixed by SAI.
- c) Provision of counselling services for the children who take part in these activities, periodically.
- d) The PT teacher and staff of school, should take the responsibility to monitor the system set up to address emergency pertaining to sports persons.
- e) School that are providing specific sports should comply with relevant safety measures as per guidelines of SAI.

## 11. Boundary Wall and Gates

RTE Act (2009) mandates that every school should have boundary wall/fencing. MHRD guidelines provide details on this.

- a) Boundary wall should be of sufficient height so that no one can scale it down and should be got fixed with concertina wire.
- b) Boundary wall should have 3-4 gates preferably on the walls of different sides so as to ensure free, convenient and prompt exit in emergency.
- c) There should be a record of visitors, suppliers and other people entering the premises on daily basis.
- d) However, entry of outsiders should be allowed only through single gate properly manned by the guards. That single gate should have telephone connection (so as to enable the guard to inform the police directly in exigency).
- e) Special surveillance and safety measures should be taken for any exit or entry by the students – be it for filed visit or for visiting their homes during the vacations.
- f) At exit time of non-residential staff and other local members these safety guidelines must be followed.
- g) The main gate should remain locked after entry of students and staff. Entry of the parents and visitors should be permitted only through small doors after verifying their identity through window during well notified schedule intervals, as such vehicles of visitors should not be allowed inside the campus.

## **12. School Premises and Surroundings**

KVS and NVS guidelines talk extensively about ensuring safety of the children in school surroundings and while a festival or celebration is being carried out in schools,

- a) The School should maintain a distance from railway tracks to provide a safe environment. If school is located near any rail track, impact of such locations on the school structure should be examined by the local authorities for the safety of the students before issuance of structural safety certificate.
- b) The School should maintain a distance from industry or chemical factory to provide a safe environment.
- c) If school located near an industry or a chemical factory producing fatal chemical products, each member including teacher, student and other staff must be made aware about different chemical product and precaution to be taken in case eventualities from the leakage of chemicals in this area.
- d) First aid and other medical systems in place to safeguard school students
- e) Each member of school including students must be made aware on periodical basis about the procedures to be adopted in case of any emergency.

## **13. Barrier Free Access for Children with Disabilities**

MHRD circular to the states / SSA framework for implementation of RTE Act specifically highlights the importance of making the school environment safe for children with disabilities and special needs.

- a) Ramps must be constructed to provide access to the following places.  
Entry to the school → Classrooms → Toilets → Playground → Library → Canteen → Auditorium/hall → Floor to floor 2.
- b) Railings need to be provided on the both sides of ramp.
- c) The school needs to make provision for children (children with visual impairment and low vision) to move around in the school safely and independently.
- d) An emergency and evacuation plan of the school should also be in Braille.
- e) Also it is important to;
  - a. List of all children with disabilities in school must be prepared
  - b. Training must be provided to teachers and other staffs to understand their limitations and procedures to help them in the event of any emergency.
  - c. There should be a designated official in the school who is entrusted with the exclusive responsibility of their needs in any emergency.

#### **14. Measures to Prevent Children from Dangers of Water and Drowning**

Following steps to be taken to avoid danger of children from drowning.

- a) The wells and ponds if exist in the campus are to be provided with protective wall and iron grills covering the well and the movements of the students should be restricted towards it.
- b) Children should not be allowed to go towards the nearby river, canals, ponds and railway tracks and to take bath using water from the overhead tanks by climbing on the terrace. Fencing should be provided to the steps of overhead tank to avoid children climbing over head tank.
- c) Movements of children are to be strictly watched through formation of groups by school authorities.
- d) Children should not be permitted to go outside the School premises during the school hours.
- e) The presence of the students in the School campus at all times should be strictly enforced.
- f) Strict discipline and to check the unauthorized absence of the students from the School is to be given paramount importance.
- g) No swimming pool will be constructed without prior permission of competent authority.
- h) If swimming pool is constructed in school premises, it must be constructed as per the prescribed norms of competent authority and should also be maintained as prescribed for its cleaning, maintain, safety, shower facilities, trained staff and other related points.

## 15. Safety from Constructional Hazards

Schools might have some ongoing construction work, extension of building or facilities that may need renovations. NVS, KVS and CBSE guidelines are highlighting the precautions to be taken when any construction work is taking place in school premises.

- a) School must obtain necessary permission from the local authorities for the constructional and repair work.
- b) The constructions must be planned during the lean time of students' presence in the school.
- c) Barricades and signboards must be installed in the construction area prohibiting the movement of students.
- d) Water storage sources for such constructions must be covered to prevent small children from any possible mishap.

## 16. Safety during Celebration of Festivals

- a) Adequate precautions should be taken with regard to the movement of children inside the campus during celebration of festival days in schools.
- b) Teachers should be put on duty to organize the activities as per scheduled plan including a plan for special needs children.
- c) Special care should be taken to see that children do not move, around the hazardous and dangerous points.
- d) No procession should be allowed to move from out of the school campus on the eve of such celebrations.
- e) Wherever the immersion of idol etc. is involved during festival, the Principal should ensure that the image/idols are handed over by the students in the Campus itself and the Principal shall arrange for immersion through outsider/security personnel.
- f) All staff members are required to be properly briefed before commencement of any programme regarding safety of children.

## D. Guidelines for Activities before Re-opening of School

Every School should prepare an Action Plan for carrying out various important activities before summer vacation so as to carry out these activities during summer break:

### 1. Repair and Maintenance Of Buildings

- a) Repair & Maintenance of building should be carried out based on the action plan as suggested in Proforma ID which is enclosed. M&R Committee should be strictly constituted as per the guidelines. It should be ensured that one officer from local PWD / Irrigation Department should be included in the committee with the help of Chairman VMC.
- b) Before summer vacation starts the M&R Committee should meet and chalk out the various activities that are required to be taken up during the summer vacation under M&R. It should also be ensured that teaching staff should not be retained unnecessarily during summer vacation for the purpose of carrying out M&R work.

- c) Once proper planning is done O.S/UDC should be entrusted with the responsibility of supervising the M&R work. Purchase of materials should be done before Vidyalaya closes.

Over all, the following activities under M&R should be taken up with priority during vacation:

- a) Repair of water supply system, electrical installation, sewer system, sanitary system, doors/window/ventilators, plaster/floor repair etc in dormitories, school building, MP Hall, dining/Kitchen and staff quarters.
- b) White washing/colour, washing/painting in all buildings including boundary wall and main entrance gate.
- c) Making the play fields up to date.
- d) Cleaning of OHT/UG sump/roof top tank/septic tank/man hole/gully trap/sewer line/open surface drain etc.
- e) Uprooting of plants/shrubs from wall & roof.

## **2. Repair of Furniture and Gadgets**

- a) It is to be ensured that all beds/cots, bench/desk & chairs/almirahs etc. are in good condition
- b) Ensure that no children sit on a rug (dari) in classroom.
- c) The beds shall be oriented properly in dormitories and should be numbered; a register should be made allocating the number of bed to a particular child, so that at the time of reporting he gets proper allocation.

## **3. Guidelines for Fire Safety Provisions**

- a) Guidelines provided by Fire and Safety department for School building must be strictly followed.
- b) Fire safety equipment required as National Building Code 2016 and relevant Indian Code provisions shall be ensured.

## **4. Measures to Prevent Children from Dangers of Ponds / Lakes / Drowning:**

- a) Construction of compound wall is to be given top priority which may help in keeping proper supervision and control over children and prevent trespassing.
- b) The open wells and ponds, if existing, in the campus are to be provided with a protective wall and iron grills covering the well and the movement of the students towards it is to be restricted. A sign board indicating "OUT OF BOUND AREA" is to be erected near such point.
- c) Not to allow children to go toward the nearby river, canals, ponds and railway tracks. No child is allowed to take bath using water from the overhead tanks by climbing on the terrace.
- d) For certain rituals and functions which are observed in the School, necessary precautions and arrangements to be made in advance. Children should not be permitted to go on rallies for immersion of idols in tanks, ponds, and wells etc.
- e) No student should be allowed to go on leave without written request of the parent or the person authorized by parent.

- f) Any person/parent visiting School must obtain permission from House Master to meet the students invariably by mentioning in the visiting register his name, address purpose, date and time of arrival and departure. This must be seen by the Housemaster and Principal.

### 5. General Safety Measures

- a) Broken furniture, naked iron rods etc. should be kept where there is no frequent movement of the students.
- b) Students should be forbidden to keep any type of weapons, toxic drugs, pornographic books, and photographs etc. with them. Surprise checking should be done randomly throughout the year.
- c) Very often students come late to the class during short breaks. No students should be allowed to go to the dormitory during small break without permission of the House Master.
- d) Proper drinking water is to be provided during class hours. Students should be kept fruitfully busy so that they may not indulge themselves in activities of indiscipline.
- e) Adequate care is to be taken while working in Science laboratory. Handling of glassware or heating of things must be done carefully.
- f) Since the School is having a very vast campus there may be chances of having long grass and marshy areas & bushes etc. Care should be taken to clean weeds and bushes all through the campus and marshy areas should be filled with soil or sand to avoid any mishaps. Steps must be taken to utilize the whole land for one or the other purpose.
- g) Entry to the campus should be ensured only from the main gate. There should be a guest book where entries of outsiders/visitors should be made.
- h) 2nd Saturday of every month may be fixed to meet parents/outsideers.
- i) Meeting of parents individually with the House Master and teachers may be organized to brief them about the child.
- j) Entry & movement of stray animals like cattle, dogs & pigs etc., inside the campus should be checked.
- k) Cases of molestation of students must be viewed very seriously. The Principal should without delay provide a complete report to their Regional Office and the NVS Headquarters so as to enable the Samiti to take necessary disciplinary action against the culprits. Under the provisions of summary trial already notified, Commissioner, GSRS, can terminate the services of any employee indulging in acts of moral turpitude.
- m) Migrated children must be made feel at home. The Principal and the teachers must accord top priority to this issue as Samiti has been receiving several migration related complaints leading to clashes

### E. Swachhh Bharat Abhiyan

The Abhiyan was launched by Hon'ble Prime Minister Narendra Modi on 2<sup>nd</sup> of October, 2014 at Rajghat, New Delhi with an aim to make India clean. It aims to provide sanitation facilities to every family, including toilets, solid and liquid waste disposal systems, village

cleanliness and safe and adequate drinking water supply by 2nd October, 2019. It will be a befitting tribute to the Father of the Nation on his 150th birth anniversary. However, it has been clearly declared that the campaign is not only the duty of the Government but each and every citizen of the country is equally responsible to keep the nation clean and swachh. In GSR perspective, we being a Residential System should also focus on Proper Sanitation, use of safe drinking water, good hygiene practices that enhance the wellbeing of students, contribute to learning achievements and sustain a healthy school environment and equity at the same time. It requires consistent efforts and effective channels of disseminating messages in the morning assembly, prayer time, house meetings, through interactions and CCA Competitions. Life skills-based Hygiene Education also helps the students to develop and practice proper hygiene.

### 1. Action to be taken on Hygiene and Sanitation of School

- a) Availability of separate toilets/urinals for boys & girls, their cleanliness & maintenance is to be ensured at all times.
- b) To ensure safe & adequate potable water in the campus.
- c) Health & hygiene of student's viz. medical care, health records, regular bathing, washing of clothes, proper turn out is to be taken care at all times.
- d) Visit of houses everyday by the HM/AHM/Staff Nurse & formal inspection once a week by the Principal/Vice-Principal & associated staff to ensure proper cleanliness, sanitation & turn out. The minutes of the inspection is to be recorded & made available to RO/HQ's
- e) Cleanliness & maintenance of entire School campus as per guidelines issued.
- f) The cleanliness & maintenance of internal roads, drainage system, sewer lines, septic tank, overhead tank, disposal of waste etc. must be periodically carried out as per guidelines issued & report made available to RO/HQ's.
- g) The efforts should be made to promote the awareness of Swachhhta campaign at the cluster/community/district level as pace setting activity & minutes recorded.
- h) To arrange a quarterly meeting with VMC, VAC to seek their cooperation and to tap the resources for further improvement of cleanliness, sanitation & hygiene in the campus.
- i) A comprehensive report pertaining to self-awareness & change in behavioural aspects of students & staff towards the sensitization & institutionalization of Swachhhta campaign should be submitted.
- j) Any suggestion/assistance/guidelines required, if any, at the level of RO's/HQ's for further improvement towards the swachhhta campaign may be sought in the further course of action.

### 2. Effective Implementation of Swachhata Campaign– Check Point

In order to avail a healthy school environment, proper sanitation, availability of potable drinking water, good health & hygiene, maintenance of school campus etc. are the key areas to take care of. The following check points are suggested in this regard:-

#### 2.1. Sanitation

- Availability of separate toilets & urinals for boys & girls.

- Availability of adequate water supply & functioning of toilets & urinals.
- Availability of requisite material for cleaning i.e. brooms, dusters, brushes, wiper, disinfectant (phenyl, harpic, naphthalene balls etc.)
- Provision to incinerator & niche to keep sanitary napkins in girls' toilets.
- Availability of schedule of sanitation/inspection chart in a proper format in every toilet & its updated record.
- Provision of liquid soap for washing hands in every toilet.
- Maintenance of toilets & to avoid seepage/cracks/leakage in the toilets.
- Provision of proper lighting/exhaust fans in the toilets.
- Provision of proper doors with bolts/latches in the toilets.
- To develop a mechanism to ensure day to day cleanliness/inspection and recording under the supervision of House Masters/House Mistress/Staff Nurse/MOD/PET's etc.

### 2.2. Potable Drinking Water

- Availability of sufficient potable drinking water at all the places in the campus from external /internal sources.
- Availability of feasibility report for potable drinking water from District/State authority.
- To check the leakages in water supply lines & to protect the same from soakpits/leach points/garbage etc.
- Updated record of cleaning, chlorination/bleaching of potable drinking water being supplied through Overhead tank (OHT) or any other source of water.
- Availability of RO water in different parts of campus.
- Safe handling & storage of drinking water should be practiced.

### 2.3. Operations & Maintenance

#### (a) Classrooms:

- Daily cleaning/dusting of classroom furniture, black boards & available teaching aid material.
- To check whether class notice board contains the display of duty roster, schedule of organizing weekly/fortnightly activities/any other relevant information.
- To check whether SMART classroom, computer lab, Art room, Music room etc. are all operational.
- To ensure proper & systematic maintenance of devices so as to keep the classroom lively & a source of effective curriculum transmission in the teaching learning process.

#### (b) Library/Labs./other activity rooms

- To check whether students & staff are making optimum use of library/labs/other activity rooms for promoting reading habits, scientific temper & adopting innovative practices in their day to day teaching/learning interaction.
- Computerization of catalogue of books & its issuance.
- To check whether equipments, chemicals, apparatus etc. are all adequately available as per CBSE norms & are being utilized judiciously under the supervision of concerned teaching faculty.

- The practical notebooks are available & updated record of practicals conducted is maintained & checked by the respective teachers.
- The cleanliness & maintenance of laboratories/library & other activity rooms are superb at all times.

(c) Houses/Dormitories (Boys/Girls)

- The schedule for cleanliness/sanitation of the houses & conduct of weekly/fortnightly/monthly activities is to be prepared & displayed on the notice board with the accountability of house appointments.
- To check whether the area inside the house or around it is cleaned regularly & maintained.
- To check whether clogged drains in & around the houses/courtyard etc. is cleaned & logging of water is removed.
- The provision of incinerator & a niche to keep sanitary napkins should be ensured in the girl's toilets.
- Cleanliness/Upkeep & maintenance of toilets & urinals is ensured.
- Proper cleanliness & layout of bedding items is ensured.
- Proper turn out of students should be taken care of at all times.
- Availability of requisite material for cleanliness & maintenance with reference to toilet articles, uniform, bedding items etc. should be taken care of.
- To check whether all the doors, windows, almirahs are operational & maintained.
- To check whether any cracks/seepage/leakage in the bathroom/toilets/dormitories is existing. If so, necessary measures for its removal are to be taken as per the directions of the Principal.
- To check all manholes of sewerage lines & to get it cleaned & covered.
- To check whether habit formation for house maintenance, proper turn out, team spirit & attitude of belongingness is developed under the leadership of HouseMaster/Mistress/AHM.

(d) Mess

- Availability of potable drinking water for washing, cooking & preparation of meals.
- To check the cleanliness & maintenance in & around the mess.
- To check the turnout of mess workers in the order of inspection with proper hair cut, nails, personal cleanliness & hygiene.
- To check all leaking taps, valves, flushing cisterns, blockage in the drains, sewage pipes, waste water pipes etc.
- To check for any cracks in walls & roofs.
- To ensure cleanliness of roof top area to avoid seepage/leakage/water-logging/short circuit etc.
- To ensure quality, quantity of ration being cooked & standard of preparation of food in the mess.
- To check pilferage, wastage of cooked food under the supervision of mess committee & Catering Assistant.
- Proper mess management in totality as per Samiti norms.

(e) Cleanliness & maintenance of internal roads, drainage system, sewer lines, septic tank, overhead tanks & disposal of waste.

- To ensure that internal roads are cleaned every day & garbage collected in the dustbins provided & disposed off regularly.
- Open drains are to be cleaned weekly.
- Sewer lines, septic tanks are cleaned monthly/quarterly.
- To ensure that all the manholes of sewerage line are cleaned & covered.
- The requisite material for cleaning the drainage/sewerage lines/septic tank/OHT is made available to the team of employees & proper record maintained.
- For the disposal of solid waste it is suggested that it should be converted into organic manure at the School level.
- The blockage in the drains, sewerage pipes, and waste water pipes should not occur, if so necessary steps should be taken to get it cleaned.

(f) Playgrounds, Lawns & Boundary Walls

- Availability of necessary tools/devices for cutting the grass, pruning the grown up plants along the boundary wall & internal roads etc.
- Likewise availability of necessary tools like grub-axe(Khurpi), spade(phawda), pick axe (Gainti), grass cutting machine, sprinkling water pipes as desired for cleanliness & maintenance of playgrounds, lawns & garden etc. in the campus.
- Lush green lawns at the entry point of Vidyalaya, in & around the houses, mess & residential area.
- Adequate water facility in playgrounds, lawns & along the boundary wall for their maintenance.
- It would be appreciated, if small nursery in the campus can be developed in consultation with Forest Department & attractive gardens, flower pots, decorative plants should be spread all around the campus to promote aesthetic sense & healthy environment.
- To organise & celebrate Van Mahotsava by inviting District forest officer & other dignitaries to gear up the maintenance of greenery & plantation in the campus.

(g) Health & Hygiene

- To check & ensure the availability of part time doctor in the campus.
- Availability of MI room & essential facilities to attend the sick children as per requirement.
- Availability of Staff Nurse should be ensured.
- Staff Nurse to attend to the sick children & provide necessary medical aid at all times.
- Visit of Staff Nurse to all the houses to ensure health, hygiene & medical care of all students.
- To keep records of health & hygiene of all students.
- To ensure quality & quantity of food being provided to the students in terms of food meeting their requirement & keeping good health without any ailments, under the supervision of School Doctor/Staff Nurse.
- To provide potable water in the mess & all around the campus for drinking purpose.
- To ensure proper turn out of students at all times.

(h) Involvement of stakeholders

- To check the constitution of various committees & their operation at various levels.
- Preparation of schedule & adherence by stakeholders.

- The outcome of organized activity in the interest of institution.
- To ensure involvement of all stakeholders & share their experiences to promote clean & healthy environment.

(i) Behaviour Change & Capacity Building

- The impact of change in behavioural aspects to acknowledge the optimistic approach for Swachchhta campaign amongst the students & staff.
- Whether general awareness & acceptance towards Swachchhta campaign is promoted & all stakeholders ensure to keep the campus neat, tidy & lively to avail a healthy environment.

### 3. Some Key Principles for Swachchhta Campaign

- Educate students about proper use of toilets & hand wash before meal & after use of toilet.
- Integrate hygiene messages in school curriculum like morning assembly, prayer & subject classes etc.
- Inform students about the changes they will undergo during adolescence & provide space for girls to talk about menstruation & menstrual hygiene.
- Encourage students to consistently use, operate & maintain drinking water, sanitation & hygiene facilities.
- Support students in playing an active role in keeping up hygiene practices both in school

& at home.

- Ensure that soap & water are always available at wash basins/toilets & urinals.
- Encourage participation of students, teachers in “clean school campaign” including planning, monitoring, operation, evaluation, maintenance as well as bringing about behavioural change.
- Organise Annual health check up of students & supervision of de-worming medicines.
- Encourage parents to participate & contribute to the JNV programs by involving them in planning & oversight for Swachchh Vidyalaya campaign.

### 4. Guidelines for Implementing Swachchhta Campaign in Schools:

In order to sustain healthy school environment in the co-educational residential set up of SVGSRs, life skills- based hygiene education is essential. In fact proper sanitation, use of safe drinking water, good health & hygiene conditions will attribute to the conducive environment for studying in JNVs & staying in its dormitories. Gyan Shakti Residential School has framed certain guidelines for smooth & effective implementation of Swachchhta campaign in GSRS.

Constitution of various committees to extend participatory contribution with the involvement of all stakeholders.

a) Houses

i) House Master/Associate House Master

ii) House Captain/Vice-Captain

iii) Four students

#### Duties & Responsibilities:-

- Preparation of monthly schedule for cleanliness/sanitation involving all the students in rotation.
- To ensure availability of adequate water & functional toilets/urinals.
- To ensure availability of cleaning material (brooms, brushes, phenyl, naphthalene balls, duster & dustbin etc.
- To check the standard cleanliness/sanitation carried out by sweepers daily.
- Updated records/inspection reports available in the earmarked register & on charts provided in the toilets/urinals at various places.
- The suggestions for improvement, if any are attended to & rectified.

#### b) School Level:-

Composition of a 15 member committee which includes:

- Principal
- Vice-Principal/Senior Most Teacher
- School Captain
- House Captain of each House (Ten in total)
- Catering Assistant
- Office Superintendent/UDC

#### Duties & Responsibilities:

- Preparation of a monthly schedule for cleanliness/sanitation of entire campus specifying the areas for cleaning on particular dates.
- The areas earmarked for cleanliness in the campus are houses/ dormitories, mess, school building, guest house, playground, staff quarters, vicinity of boundary walls & Principal's residence etc.
- To ensure availability of cleaning materials (brooms, brushes, phenyl, naphthalene balls, duster & dustbin etc.) & tools for grass cutting, pruning, watering, plantation etc. to the engaged work force.
- To ensure availability of adequate water & functional toilets/urinals.
- The quality of cleanliness/sanitation carried out by the work force.
- In order to accomplish the task of cleanliness/sanitation & maintenance of the entire campus, an additional work (need based) may be engaged.
- The Principal may engage the additional man power on the optimal wages for a day or so & meet out the expenditure incurred from the available contingencies.
- Theme based cleanliness drive be organised weekly/fortnightly in the Vidyalaya with the assistance of all stakeholders.
- It is necessary to hold periodical meetings & assess the progress of cleanliness, sanitation & hygiene in the campus. Suggestions, if any may be reviewed & attended to regularly.
- The meeting so held may be recorded & kept intact for further inspection by the officials & visitors etc.
- Updated records/ Inspection reports should be available in the earmarked register & on charts provided in the toilets/urinals & at various places.
- The suggestions for improvement, if any are to be attended to & rectified.

- Adherence to all the circulars issued by MHRD/NVS HQR's from time to time pertaining to Swachhta campaign in letter & spirit.
- Above all, the importance of dignity of labour & self-awareness for the nationwide Swachhta Campaign to be inculcated at various forums amongst the staff & students.

## Reference Documents

- 1) Construction Activities, NavodayaSamiti,  
<https://navodaya.gov.in/nvs/en/Construction/Construction-Activities/>
- 2) School Infrastructure (norms), CBSE, <https://www.cbse.gov.in/cbsenew/infra.html>
- 3) Compendium of Architectural Norms and Guidelines for Educational Institutions, Central Public Works Department (CPWD),  
[https://cpwd.gov.in/Publication/Compendium\\_of\\_Architectural\\_Norms%20\\_guidelines\\_for\\_Educational\\_Institutions.pdf](https://cpwd.gov.in/Publication/Compendium_of_Architectural_Norms%20_guidelines_for_Educational_Institutions.pdf)
- 4) Scheme for Construction and running of Girls' Hostel for students of Secondary and Higher Secondary Schools - Revised guidelines, Ministry of Human Resource Development (MHRD),  
[https://www.education.gov.in/en/sites/upload\\_files/mhrd/files/upload\\_document/circular-revised%20cost%20norms.pdf](https://www.education.gov.in/en/sites/upload_files/mhrd/files/upload_document/circular-revised%20cost%20norms.pdf)
- 5) India Standard IS 8827- 1978 Recommendations for Basic Requirements of School Buildings
- 6) National Building Code 2016, Part-3 – development Control Rules and General Building Requirements