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GOVERNMENT OF INDIA

MINISTRY OF HEALTH & FAMILY WELFARE

NIRMAN BHAVAN, NEW DELHI - 110011

D.O No. Z.28020/75/2012-CH

Date: 28<sup>th</sup> February 2018

*Dear colleague,*

National Health Mission has been implementing successfully Facility Based Newborn care programme at various levels to reduce neonatal mortality and morbidity. Improving the quality of care in these units is of utmost urgency and importance. In this endeavor recently a rapid assessment of SNCUs with high mortality rates was carried out by central teams to ascertain the gaps and provide solutions to strengthen these services.

The experts noted that most of the SNCUs which were located in the medical colleges, dealt with double burden of overcrowding and inadequate manpower and equipment. The absence of a designated nodal person for the newborn care unit and frequent rotation of the service providers especially staff nurses further compromised the quality of care provided in SNCUs.

In this regard, following recommendations which includes both short and long term solutions to be followed at the facility and state level are suggested for strengthening the services to improve the quality of care in newborn care units:

- Under LaQshya initiative, the states are conducting gap analysis and undertaking budget proposals for the labour rooms and maternity OTs at the district hospitals and medical colleges. In addition to this, a **facility level gap analysis of SNCUs/Newborn units including NBCCs** may also be carried out by Department/Unit of Pediatrics with respect to infrastructure, human resource in all cadres, capacity building and equipment along with its maintenance. The additional budget is to be included in state PIP where ever required.
- A faculty member/medical officer be designated as nodal person of **Newborn Care Unit** who will ensure the implementation of standard treatment protocols particularly on- rational use of antibiotics, correct use and monitoring of oxygen, ensuring KMC, optimal feeding support for all preterm and Low birth weight (LBW) babies.
- All newborn care units should report regularly using Govt of India online **SNCU reporting system** and use the information generated at the facility for continuous quality improvement. All stillbirths and newborn deaths must be

jointly reviewed by the Department/unit of Pediatrics and Obstetrics and Gynecology to address the preventable causes of such deaths.

- **Regular facility follow up of SNCU discharged babies and screening of newborns for birth defects, vision and hearing must be conducted in coordination with the District Early Intervention Centres for prompt detection and appropriate management of any developmental delay.**
- Further, it was noticed that SNCUs were overcrowded with lot of referrals from peripheral units. Many of these babies do not require intensive care and in turn get separated from their mother when kept in SNCU for management, which is not ideal for the development of the baby. Instead, these cases can easily be nursed by the mother under close observation of the service provider.
- In this regard, it is proposed to **revise the existing layout of SNCU to have additional space to accommodate both mother and baby together** for developmentally supportive care for the newborn and ensuring adequate provisions for the stay of mother in terms of bed, diet and treatment etc. Detailed guidance note for service provision and revised **Layout plan for establishing mother baby care unit is attached as annexure (A&B).** Operational Guidelines and training videos for Family Participatory care are shared with the states to equip the mothers in providing care to the newborn.
- **The states will have to customize the mother newborn care unit depending on the space available.** If there is additional space within the SNCU, then step down area and KMC unit may be merged and developed as mother and newborn area; otherwise additional space may be created in or adjacent to the existing SNCU complex. The revised SNCU layout plan should be implemented in all new SNCU constructions.
- Newborn Stabilization Units (NBSU) at FRUs serve as an important link in providing facility based newborn care at sub district level – closer to home and reduce load on the SNCUs. **Pre-referral stabilization of a sick newborn at NBSU is critical in improving the ultimate outcome of the newborn.** These NBSUs may also provide facility for keeping mother and newborn together (MNCU unit) and provide closely supervised treatment for the newborn without separating the mother and newborn. The States can plan for strengthening the existing Operational NBSUs by submitting budget proposals in the PIPs. **The Staff nurses and medical officers of NBSUs may be trained in three day NBSU package developed by CH division for their capacity building to provide adequate quality of care to these babies.**
- To hasten the pace of FBNC trainings, **the states may designate and develop one or more state medical college as State Newborn Resource Centre** to provide technical support to the state for capacity building and mentoring of



newborn care units at all levels in the state. State may also propose for clinical care coordinator for assisting state child health nodal officer for monitoring and mentoring clinical practices in the SNCUs in the State.

- **States may start neonatal nursing diploma course in Medical colleges/District Hospital.** This will not only provide additional nursing hands in the SNCUs but also provide specially trained nurses to manage SNCUs in future.
- **The state NHM, Medical Directorate and Department of Medical Education may develop mechanism of convergence** for smooth functioning of newborn care at all levels in the state. Ensuring adequate and dedicated human resources for SNCUs and newborn units in medical colleges is of utmost importance as it will not only help in developing medical colleges as model units but will also ensure that the future service providers learn standardized quality care.

I am sure these recommendations will help the states in transforming the quality of newborn care in these units.

*With regards,*

Yours sincerely,

  
(Manoj Jhalani)

The Principal Secretary  
(Health & FW)  
All States/UTs

Copy to:

- 1) Principal Secretary Medical education  
All States/UTs
- 2) Mission Director (NHM),  
All States/UTs
- 3) Child Health Nodal Officers  
All States/UTs

**Child Health Division**  
**Ministry of Health and Family welfare**  
**Government of India**

**Guidance Note on Revised SNCU Configuration**

Under National Health Mission, more than 700 SNCUs have been established across the States and around 9 lakh newborn treated annually. Although the national average of mortality rate is around ten percent, there is a lot of scope for improving quality of care provided in SNCUs. Further, dissemination of Kangaroo Mother Care (KMC) and Family Participatory Care (FPC) guidelines empowered the mother to stay with the newborn and provide developmentally supportive care.

It has been observed that most of the SNCUs are having following challenges:

- Overcrowding in the units, particularly with referrals from sub district /peripheral areas and many of these babies do not require intensive care.
- Following admission in SNCUs, newborn get separated from their mothers whereas many of these could still be managed by nursing with their mothers, under close observation of the service provider.
- Mothers of out-born admissions do not have provisions for stay and postnatal care at the facility.
- SNCUs in most of the states are built as per the availability of the space and technical input available and not as per the guidelines or laid out floor plans hence there is no uniformity.

In this regard, there is a need to redefine the configuration of SNCU complex. It is desirable to have the distinct areas to deliver quality services at SNCU and to recapitulate, the areas of SNCU complex are enumerated as under:

- **Waiting Area** in front of SNCU with simple amenities like comfortable sitting space, safe drinking water, AV system, Tea/Coffee vending machine and a wash room for the parent or attendants.
- **Entry area** – space for Gowning, hand washing, Shoe rack
- **Follow UP area** with AV facilities and adequate space for daily counselling, during discharge and imparting FPC training
- **Reception area** for receiving the cases and assess under triage area
- **Newborn care area** (SNCU area for cases admitted as per Admission criteria for SNCU) -to accommodate at least 20 Radiant warmers with additional clear, designated area as isolation ward for the infectious cases like Varicella, diarrhea etc. and area for procedures (desirable). Separate out-born and inborn units may **not** be required if strict asepsis protocols like that of an OT are followed.

Additional hand washing facility within the SNCU, Mother's area, feeding room (Human Milk Storage Room) will help in ensuring hand-washing before handling of newborn.

- Doctor's and sister's duty room with wash rooms, storage rooms and Janitors/sluice room
- A separate Step down/ KMC unit is no longer required and is to be renovated or merged as **Mother -newborn care unit (MNCU)** to keep the mother- baby dyad together to fulfill the following objectives:
  - a) Decongesting SNCU of newborns who do not require intensive care but need observational care for their medical conditions.
  - b) Making provisions (Bed, diet and treatment) for the mothers of SNCU admissions.

- The admission criteria of SNCU as per FBNC Operational Guidelines will continue to be followed.
- **NO newborn deserving admission in SNCU will be shifted to the MNCU**
- Stepdown/ KMC unit may be amalgamated as **MNCU** to have provisions for both mother and baby.

It is suggested that the ideal available space for keeping mother and baby dyad together could be the designated space for step down unit/KMC ward of the SNCU, as already described in the operational guidelines of FBNC & KMC. This area may be called as Mother Newborn Care Unit (MNCU)

#### **What is Mother Newborn care unit (MNCU)**

A detailed guidance note to guide the states for establishing MNCU is being shared highlighting the layout and services to be extended in this area. Each state will have to customize it facility-wise, based on local needs and make it contextual. The forthcoming PIPs can include the budget proposals from the states for gap filling of SNCUs having high case load/overcrowding. Next on priority should be the units which are in the process of developing KMC or step down area. The proposals will be contextual depending on whether the unit will require renovation or extension of existing area or create additional space to accommodate babies with their mothers at SNCUs. Once successful they can extend it later to all units in phased manner. The effort should be to have a room close to SNCU and big enough to have adult beds, a separate eating and washing area for the mothers.

**Location** Preferably as a part of SNCU complex but in case additional space is not available in the existing SNCU an area in close proximity may be identified and re-designated.



**Bed strength** should be preferably 1.5 times or at least the same number as that of SNCU bed strength. Currently the functional step down/ KMC unit can be renovated/expanded/merged to accommodate both the mother and babies (20-30 Fowler's beds). Each facility will have to determine the requirement depending on the case load and the bed days required thereof. Each bed will be separated from one another with the curtains so that mother can continue to breast feed/express milk in privacy. Heating and cooling devices according to the weather and wall thermometers must be made available to ensure temperature 26-28°C.

**Space** As an indicative average space @120 sq feet/bed will be required. Assuming the average bed strength of MNCU will range from 20-30 beds then the required area will be around 2400 sq.ft. Additional area for fire exits will also be required. With at least 2.5 meter distance between centers of two Fowler's beds to prevent cross infection. Every bed shall be provided with IV stand, bed side locker, chair for attendant. There should be adequate power points for use of radiant warmer, phototherapy, suction machine etc. Provision for oxygen supply is required.

**Layout of the MNCU** should be such that the following services at MNCU are delivered effectively :

- **Counselling & Follow up Area (common with SNCU)**: for daily counselling of the mothers under Family Participatory Care, discharge counselling, daily updates and review at follow up.
- **Entrance (common with SNCU)**: space for the security guard and space for shoe rack and slippers for entry into the ward. The security guard will be mandatory to control access.
- **Hand washing Area** : sinks with elbow tap handle with soap solutions,
- **Nursing station**: A space for the nursing staff for routine services, investigations and recording/reporting
- **Treatment / examination area**; designated space for performing the routine activities- dressing or putting an IV line. Dedicated area for keeping equipment like emergency tray, phototherapy etc.
- **Dedicated washrooms** with flush and separate washing area with running water facility so that mothers can bathe daily and wear clean clothes.
- **Dedicated pantry or dining area** for mothers will be essential for ensuring asepsis in the ward and will avoid attracting pests.

#### **Admission Criteria for newborns in MNCU**

Following criteria are for those babies who will be nursed with the mother under the observational care of the service provider. The SNCU/ critical care area will continue to have admissions as per Operational Guidelines of FBNC.

- All SNCU admissions who do not require IV Fluid and oxygen supplementation.
- Newborn who need admission for only phototherapy, completion of antibiotic course, feeding support, etc.
- Any newborn whether in-born/out-born **who is not sick and weighs more than 1800 gm but less than 2000gm** and needs soon after birth KMC, breast feeding support only till the requisite weight gain for discharge.
- The mother too will be shifted in this area after delivery.

This is to reiterate that the ultimate responsibility of the newborn will be of service provider

**Operational System in MNCU:** for both newborn and mother are as listed under:

- a) MNCU will be jointly owned by both Department/Unit of Pediatrics and Obstetrics and Gynecology for management of common conditions of both the mother and baby and the designated doctors and nurses will monitor them daily.
- b) Sister In charge for SNCU will be overall in charge for managing the daily routine of services.
- c) All the mothers whose babies are treated in SNCU will be admitted here and will have free bed, diet and treatment. Mothers who have not delivered at the facility or referred from periphery will be admitted on priority as attendant. In case of overcrowding the inborn mothers may be provisioned in the post-natal ward.
- d) To optimally utilize the available resources at SNCU; functions like use of phototherapy for neonatal jaundice, completion of antibiotics, KMC, feeding support and care till adequate weight gain before discharge will be followed up here.
- e) Any admission coming directly in the mother newborn area should be reported in the routine reporting mechanism regularly.

**Human resource:**

HR may be proposed under the overall pool of SNCU or may be added in main hospital pool and designated for the area to ensure 24\*7 services.

The faculty member/medical officer designated as nodal person of Newborn Care Unit will be overall in-charge and will ensure adherence to protocols and daily rounds by the designated staff of Department/Unit of Pediatrics and Obstetrics and Gynecology.

One staff nurse for every 8 beds in each shift may be ensured with adequate provision for leaves and night off must be ensured. One staff nurse for Follow up

OPD and labour room for newborn care by shift is also suggested for high case load facilities.

RMNCH counsellor in the morning shift to support the staff nurses in imparting Family Participatory care or breast feeding support and help the medical officer in discharge counselling. In order to ensure daily services at least two in number will be required at the high case load facilities.

Support staff in adequate number in each category – ayah, janitors and security guards to ensure restricted entry in the area, aseptic protocols in the area, clean wash rooms and eating area.

#### Equipment/ Commodities / Furniture

Following equipment may be in the overall pool of SNCU but proposed additionally to be available in the ward always:

- a) Radiant warmers -2
- b) Phototherapy -4
- c) Newborn Resuscitation trolley (**Crash Carts**)with essential logistics – Bag and mask Oxygen source – cylinder/oxygen concentrators, suction facility and necessary medications
- d) Furniture and Furnishings – Fowlers beds for Mothers, KMC chairs, side lockers
- e) Adequate supply of Commodities like disposables,gloves etc.

#### Budgeting:

An illustrative budget for the mother-newborn care unit is suggested as under:

	Activity	Number& Cost
<b>1</b>	<b>One time establishment cost:</b>	
	<b>Estimated cost for infrastructure</b>	
i	Area for Mother and New born wards	2375 sqft
ii	Area for Fire Corridor	625 sqft
	Total area for additional infrastructure (i+ii)	3000sqft (i.e. 278.81sqmt)
<b>A</b>	Total cost of Construction (3000 sqft without Pile Foundation)	<b>Rs. 92 Lakh approximately</b>
	<b>Estimated cost for equipment and furniture</b>	
i	Cost for 28 Beds (@ 20000 per Beds)	Rs 5.6Lakhs
ii	Cost for 2 Radiant warmer (@60000 per warmer)	Rs 1.2Lakh
iii	Cost for4 Phototherapy unit (@35000 per Phototherapy)	Rs 1.4Lakh
<b>B</b>	Total cost for equipment and Furniture (i+ii+iii)	<b>Rs 8.2 Lakh</b>



C	total cost for additional infrastructure, equipment and beds (A+B)	100.2 Lakh (1 crore approx.)
<b>Recurring Cost *</b>		
	To be budgeted in addition to ongoing SNCU operational Cost	Rs 2.6 lakh

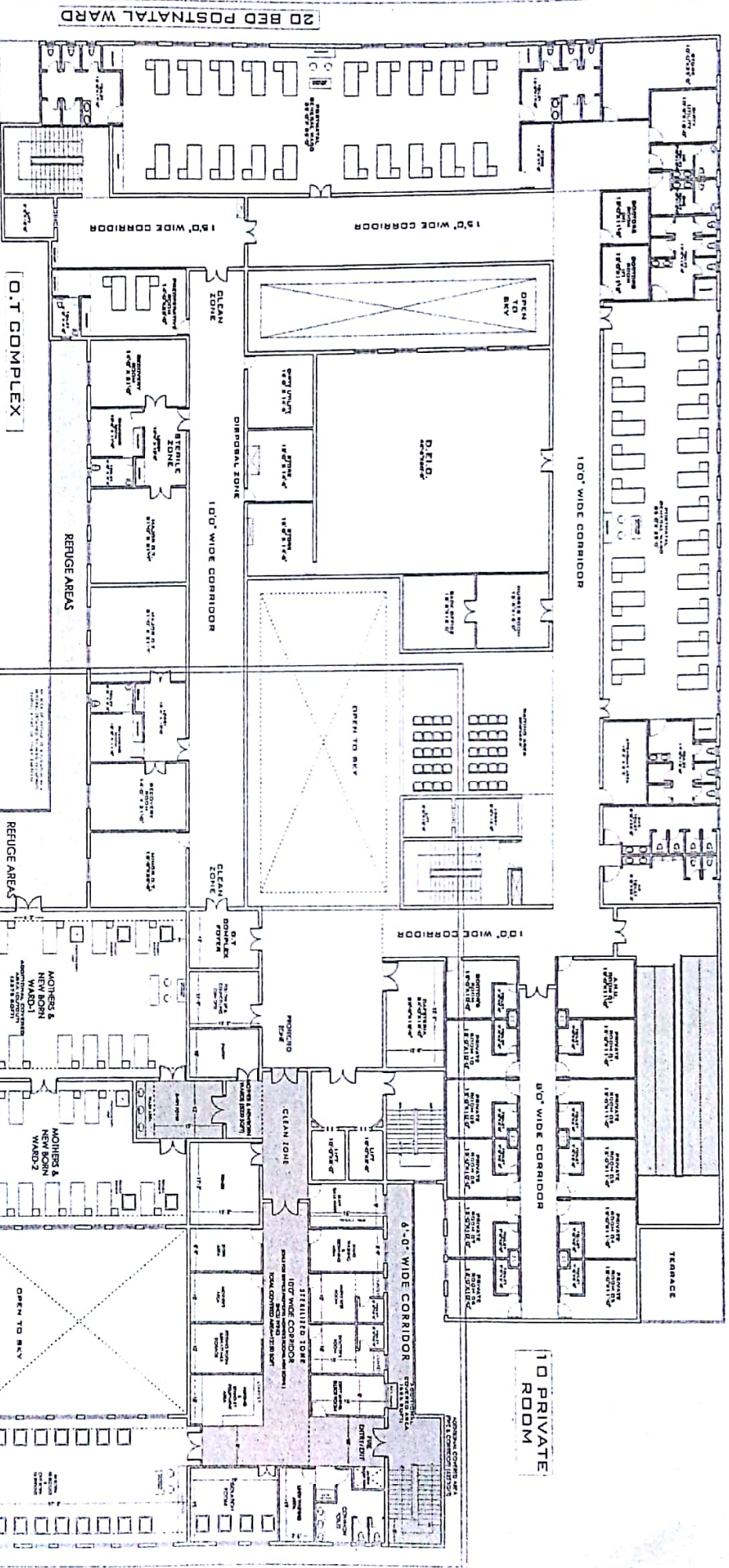
The onetime establishment cost does not include the HR and training costs as these will be state specific and need based.

\*The additional costs can be budgeted with justification along with the SNCU proposals. The details regarding equipment, furniture and furnishing, HR, training and IEC for both the mother and baby can be referred from the operational guidelines for both **Family Participatory Care and Kangaroo Mother Care**.

20 BED POSTNATAL WARD

RAMP

22.01.2018



MCH WING-LDR CONCEPT 100 BEDDED HOSPITAL

FIRST FLOOR PLAN

EXISTING COVERED AREA=37000 SQFT  
ADDITIONAL COVERED AREA=2375+625= 3000 SQFT  
NEW PROPOSED COVERED AREA=37000+3000=40000 SQFT

MCH WING-LDR CONCEPT 100 BEDDED HOSPITAL

FIRST FLOOR PLAN

EXISTING COVERED AREA=37000 SQFT  
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MOTHER & NEWBORN WARD (5000 SQFT)

SNCU WING TOTAL COVERED AREA=12775 SQFT



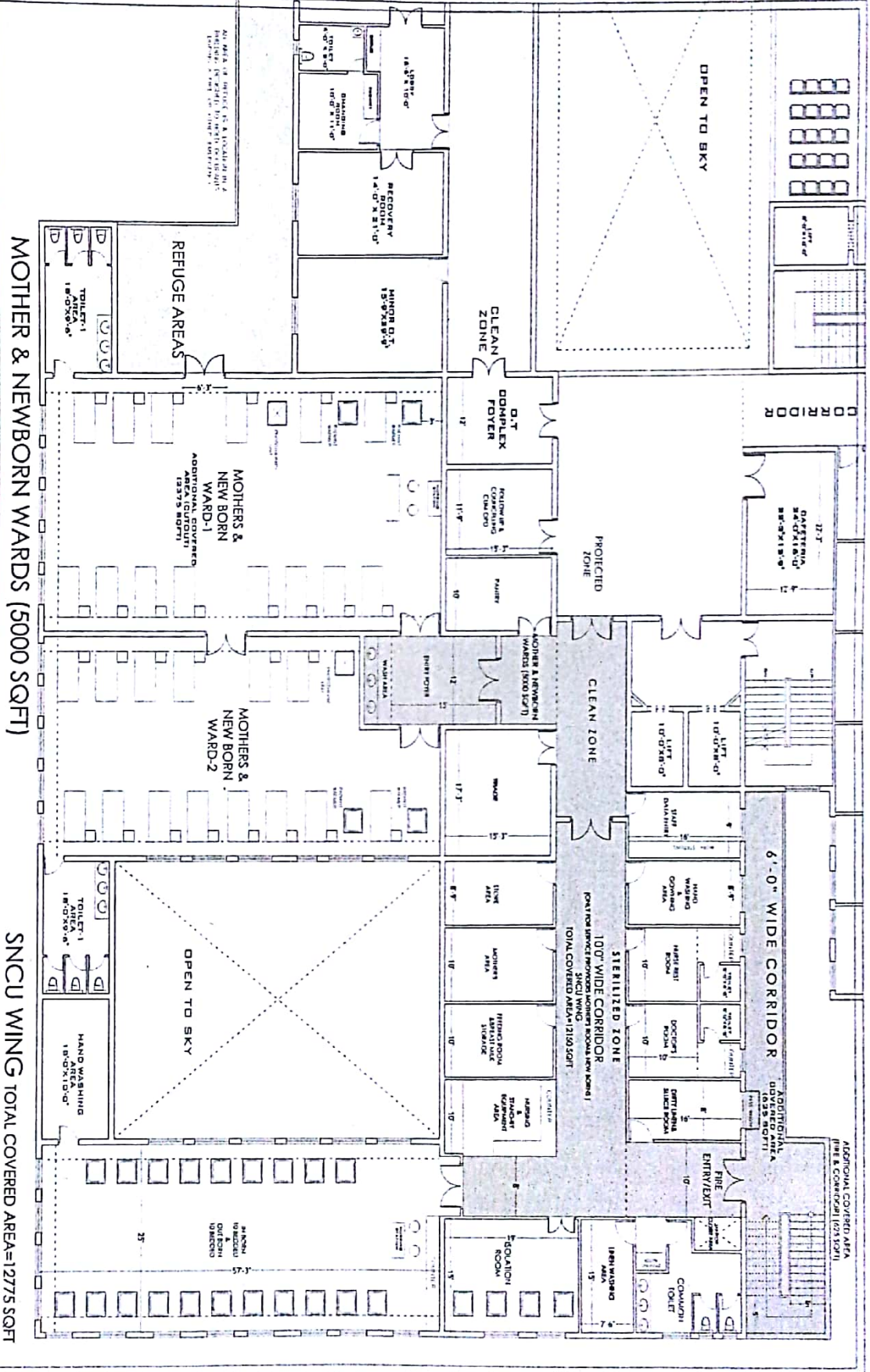
**MCH WING-IDR CONCEPT 100 BEDDED HOSPITAL**

**FIRST FLOOR PLAN**

EXISTING COVERED AREA=37000 SQFT

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**MOTHER & NEWBORN WARDS (5000 SQFT)**

**SNCU WING TOTAL COVERED AREA=12775 SQFT**