

**Health Care Plan Review Unit**

# PROCEDURES FOR SUBMISSION TO



# HEALTH CARE PLAN REVIEW

**State of New Jersey  
Department of Community Affairs  
Division of Codes and Standards  
Bureau of Construction Project Review  
PO Box 817  
Trenton, New Jersey 08625**



**State of New Jersey**  
Chris Christie, Governor

**Department of Community Affairs**  
Richard E. Constable III, Acting Commissioner

NEW JERSEY STATE DEPARTMENT OF COMMUNITY  
AFFAIRS

HEALTH CARE PLAN REVIEW UNIT

**PROCEDURES FOR SUBMISSIONS TO HEALTH CARE  
PLAN REVIEW EFFECTIVE – March 7, 2011**

Contents:

- I. PLAN REVIEW PROCESS
- II. INQUIRIES
- III. REQUIRED PROJECT DATA
- IV. SCHEMATIC SUBMISSION
- V. PRELIMINARY SUBMISSION
- VI. PARTIAL APPROVAL
- VII. FINAL SUBMISSION
- VIII. FINAL APPROVAL
- IX. FEE CALCULATION
- X. APPLICABLE CONSTRUCTION CODES, REGULATIONS  
AND STANDARDS
- XI. PLAN REVIEW RECORD & ENGINEERS CHECKLIST

Please be advised that the plan review conducted by the New Jersey State Department of Community Affairs shall in no way ease or relieve the responsibility of the design professional from the execution of submissions for plan review in compliance with all codes, regulations, standards and comments in conformity with best practices current to the state of the art.

The following procedures shall be adhered to for the submission of prints, specifications and required documents to Health Care Plan Review (hereafter HCPR) for plan review and project approval.

Copies of this document and all necessary forms and applications may be obtained at the following web address:

[www.nj.gov/dca/divisions/codes/offices/bcpr.html](http://www.nj.gov/dca/divisions/codes/offices/bcpr.html)

## **I. PLAN REVIEW PROCESS**

Plans, specifications and required documents, for the construction of new facilities, additions and renovations for all types of health care facilities, licensed by the New Jersey State Department of Health & Senior Services (hereafter DHSS), shall be submitted by the design professional of record to:

NJ DEPARTMENT OF COMMUNITY AFFAIRS  
HEALTH CARE PLAN REVIEW  
P.O. BOX 817  
101 SOUTH BROAD STREET, 4TH FLOOR  
TRENTON, NEW JERSEY 08625-0817

for review, comment, and release prior to the submission of an application to the local construction official for a building permit.

Prints, specifications and required documents shall be reviewed for compliance with mandated codes, regulations and standards. A list of all current codes, regulations and standards may be obtained from Health Care Plan Review. Written and oral comments based on each review shall be shared with the project architect or engineer and the owner or the owner's designated agent.

Responses and resolutions which have been accepted shall be properly indicated on the prints of the subsequent submission and/or in the specifications.

Comments not responded to or unresolved and prints not in compliance with previous comments shall be cause for incomplete review. When a given review is determined to be incomplete, that project shall be placed last in the current workload.

For all submissions with a valid Certificate of Need (hereafter CN), the narrative portion of the CN application, as may be modified by the Commissioner of Health's approval letter, will establish the scope of the work to be executed and shall contain the requirements for the physical plant appropriate to the Use Group and characteristics of patients or residents and will describe the services or treatments to be rendered.

For Reference Number Projects (non-CN projects) a project narrative will establish the scope of the work to be executed and shall contain a detailed description of the scope of work to be performed and a description of the services or treatments to be rendered.

The quality of the review and time for the review process are directly proportional to the quality of the submittal. Generally, the more complete and detailed the submittal, the fewer comments and the shorter the review time. Professional designers and their project personnel should work within the context of N.J.A.C. 5:23-1.3 and these procedures in order that the review process may proceed in a timely fashion mutually beneficial to all parties.

The task of the reviewer is to verify that contract documents provide minimum compliance with the Codes as set forth under N.J.A.C. 5:23-1.3. To that end, the reviewer will assist the design professionals to the best of his/her ability, however, the reviewer's charge is not to direct or design projects under his/her review.

The plan review process is complex, often with considerable give-and-take between the reviewer and the facility. The owner's or the facility representative's participation in the plan review process is essential if the resulting building is to truly satisfy their needs and serve its intended purpose.

The owner's or the facility representative's attendance at all meetings further aids the review process by insuring the full participation of all parties in discussion related to plan changes, or compromise necessary to satisfy program requirements within licensure and life – safety code limitations.

## **II. INQUIRIES**

When sending submissions to HCPR, please use the following addresses:

By U.S. Mail:           New Jersey Department of Community of Affairs  
Health Care Plan Review  
P.O. Box 817  
Trenton, NJ 08625-0817

By Courier Service:   New Jersey Department of Community Affairs  
Health Care Plan Review  
101 South Broad Street, 4<sup>th</sup> Floor  
Trenton, NJ 08608

### **Codes, Regulations and Standards Interpretations**

Questions regarding plan review procedures or building code interpretations may be directed to the supervisor of the Health Care Plan Review Unit at 609-633-8151 or in writing by using the addresses noted above. Our fax number is 609-633-2525 and our email address is [planreviewintake@dca.state.nj.us](mailto:planreviewintake@dca.state.nj.us).

Questions regarding licensing standards and interpretations of those standards should be directed to the Department of Health and Senior Services at:

**Certificate of Need & Health Care Facility Licensure (CNHFL)**  
PO Box 385  
Trenton, NJ 08625-0385  
609-292-6552

## **III. REQUIRED PROJECT DATA**

### A. Fee Schedule and Payment

Fees shall be calculated, using the Plan Review Fee Schedule and Volume Calculation Work Sheet (if applicable), to cover the type of work being done – either new buildings and additions, or for alterations and renovations. Fee payment must accompany the project application in order to avoid delaying the assignment of the project to the review team. Refer to page 18 for specific information for completing the Fee Schedule.

## B. Project Identification

The CN number assigned by DHSS and/or the reference number assigned by DCA shall appear on all correspondence, on each sheet of the prints, and on the title sheet or first sheet of the specifications, addenda, and any supportive information submitted subsequent to the initial submission.

## C. Authentication of Submitted Plans and Specifications

The signature and embossed seal of the State of New Jersey registered architect or State of New Jersey licensed engineer, who prepared the prints or under whose supervision the prints were prepared, shall be affixed to each sheet of each copy of the prints submitted and on the title sheet and/or of the first sheet of the specifications, addenda and any supportive information.

### EXCEPTION:

Minor work, which does not jeopardize life safety, health, or the welfare of the occupants and/or users, which can be clearly indicated on prints, may not require an architect's or engineer's seal and signature. This determination shall be made on a project-by-project basis in conjunction with DCA's Supervisor of Health Care Plan Review Unit and shall not be accepted as common practice.

## D. Construction Phasing

Plans and specifications for projects involving additions or alterations shall include information on the construction phasing necessary to insure the safety and well being of the occupants and as required to minimize disruption of existing services during the work.

## **IV. SCHEMATIC SUBMISSION (Optional)**

### A. Documentation

1. A Program Narrative: This narrative shall, for CN projects, expand on the narrative in the approved CN application as it relates to construction. For Reference Number projects, a project narrative, as determined by the facility, will establish the scope of the work to be executed and shall contain a detailed description of the scope of work to be performed and a description of the services or treatments to be rendered.

In either case the narrative shall fully describe the current existing conditions (i.e. building Use Group, Construction Type, Use Group of other tenants, extent of demolition, etc.), the intended use of the space, the treatments or services to be rendered after completion of the project, project construction phasing (if applicable) and all new work to be done.

For projects not required to have a CN but which must still have approval from DHSS a copy of the DHSS approval letter shall accompany the narrative.

2. A Schedule of Licensed Beds: A listing of all approved licensed beds by service (Med/Surg, Pediatric, Obstetrical, etc.) shall include the bed capacities by nursing unit and by room.

3. Health Care Plan Review Record, Part I.

4. Means of Egress Sheet (Attachment #1 to Plan Review Record).

(Items 3 and 4 are available at HCPR)

## B. Prints

1. Site Plans (if applicable) shall indicate (but need not be detailed):

a. Metes and bounds

b. Orientation

c. Main traffic arteries (access to sites)

d. Roadways (on site) curbs, walks, parking areas, fire lanes, and loading docks.

e. Barrier-free parking, accessible routes, curb cuts, drop-offs, etc.

f. Building footprint (existing structures to remain and/or be demolished shall be shown).

g. A map indicating the location of the facility in its geographic area.

h. Site survey showing existing utilities.

2. Architectural plans, elevations and sections:

a. 1/4" or 1/8" scale single line floor plans of each floor showing the relationship of the various departments and services to each other.

b. Each room shall be labeled with regard to its use and shall be numerically identified for reference purposes. Actual or program occupancy for each room shall be provided.

c. Simple vertical sections or space diagrams. (if applicable)

d. Transverse and longitudinal sections. (if applicable)

e. If the project is an addition, the new building shall be shown in relationship to the existing building to which it is attached.

f. If the project is a renovation, provide a plan of the existing floor on which the renovation is proposed.

g. For major addition/renovation projects (as determined by HCPR) separate fire and egress plans of each floor (scaled at not less than 1/16 of an inch) shall be provided which indicate locations of required fire resistance rated construction, occupant loads and exit units. Legends on prints shall include but not be limited to:

1) Fire walls (NJ IBC/2009, Section 706.0)

2) Rated corridors (NFPA 101 2000, 18-3.6 and NJ IBC/2006 1018)

- 3) Horizontal exits (NFPA 101-2000, 18-2.2.5 and NJ IBC/2006, 1025)
- 4) Smoke barriers (NFPA 101-2000, 18-3.7 and NJ IBC/2009, 407.4, 710)
- 5) Exits (NFPA 101-2000, 18-2). Coordinate with the Department of Health, Means of Egress Sheet. (See Item III, A. 4. above)
- 6) Suites (NFPA 101-2000, 18-2.5.2 through 18-2.5.9 and NJ IBC/2009, 1014.2.2 through 1014.2.7)
- 7) New and altered area.
- 8) Existing areas to remain.

## **V. PRELIMINARY SUBMISSION (80% Developed) – (Optional)**

### A. Documentation

1. Health Care Plan Review Record, Part II

### B. Construction Prints

#### 1. Site Plan

- a. The Site Plan (if applicable) shall be fully developed to indicate the complete scope of work in accordance with mandated codes, regulations, licensure standards and review comments.

#### 2. Architectural plans, elevations and schedules (80% developed)

- a. Plans of basement, floors, roofs and other appropriate areas (if applicable) showing room sizes, items of major fixed equipment, and proposed space use. All rooms and/or areas shall be labeled with regard to use and numerically identified.
- b. Elevations shall indicate mass of building, locations and configurations of doors, windows and other openings. Materials may be noted, but need not be shown graphically.
- c. Wall sections shall be limited to those “most typical” to indicate major construction. Materials may be noted or graphically indicated.
- d. Door, window and finish schedules shall be blocked out and minimally completed. (i.e. “typical room” finishes for each department will be acceptable on Room Finish Schedule. Each and every room, although listed, need not be completely noted).
- e. Details as appropriate. (fire walls, fire separations, etc.)

#### 3. Structural Plans and Details (if applicable)

- a. Plans for foundations, floors, roofs and all intermediate levels with sizes, sections and the relative location of the various structural members.
- b. Schedule of beams, girders and columns.
- c. Dimensions between floor levels, column centers and offsets.
- d. Dimensions of special openings and pipe sleeves.
- e. Details of all special connections, assemblies, and expansion joints.

#### 4. Mechanical-Electrical

##### a. General

- 1) Preliminary drawings shall outline all equipment and systems required by applicable codes.
- 2) The drawings showing room space assignment and specifications shall be to scale. Piping and ductwork on floor plans may be single line.
- 3) A complete symbol list shall be submitted for each trade. All room names shall be shown on all mechanical and electrical plans.
- 4) Area of work on each plan shall be shown on a key plan on each drawing where the plan shows only a portion of the building.
- 5) Building, floor, area of work shall be given in title block.
- 6) Existing systems at areas of modifications, where pertinent to new systems, or portions of a new system.
- 7) Flow direction arrows or sizes in all mains and branch mains of heating, cooling, water, fire protection, medical gas and vacuum system.
- 8) Identification of all pipe and duct systems by line and symbol or note.

#### 5. Utility Site Plans (if applicable)

- a. Location of new utilities and existing utilities in areas of new work: Service water, fire, sanitary sewer storm, natural and LP gas, steam, hot water, chilled water, condenser water, oxygen, nitrous oxide, fuel oil lines.
- b. Location of new and existing water storage, fuel oil, gasoline, LP gas, oxygen and nitrous oxide storage tanks, water wells, dry wells, pump houses, valve pits, pumping stations, manholes, outdoor incinerators, fire hydrants, siamese connections, cooling towers, sewage disposal system, sewage treatment plant.
- c. Location of utilities, tanks, etc. to be relocated, removed or abandoned.

- d. Invert and rim elevations of manholes; invert elevations of water and sanitary sewer lines at crossings; invert or centerline elevations of all utilities penetrating foundation or below grade walls.
- e. Electrical site plan shall include but not be limited to:
  - (1) Point of electric service drops or service lateral.
  - (2) Single service or dual service. (If dual service, note whether or not service originates from different utility company substations).
  - (3) Incoming voltage and current rating.
  - (4) Overhead service or underground service.
  - (5) Incoming underground service with burial depth.
  - (6) Location of outdoor pad mounted transformers, generators, and any major electrical equipment.
  - (7) Location of site lighting, including parking lot and driveway illumination.
  - (8) Incoming communication lines.
  - (9) Any signal and low voltage wiring between buildings.

6. Heating, Ventilation and Air Conditioning

- a. Location and arrangement of new boilers, condensate pumps, deaerators, storage tanks, water treatment, blowdown, heat, exchangers, hot water pumps, and other primary equipment required for heating systems.
- b. Location and arrangement of cooling towers, chillers, condensers, compressors, rooftop units, pumps, and other primary refrigeration and air conditioning equipment.
- c. Location and arrangement of all air handling units, control dampers, coils, filters and humidifiers.
- d. Air distribution system, including supply, return, exhaust, outdoor air and air relief ductwork.
  - (1) Required fire and smoke dampers need not be shown on floor plans in this submission. However, if some are shown on a particular plan, all shall be shown on that plan.
  - (2) Many code violations have been encountered where corridors or suspended ceiling spaces above corridors are used as supply, return, or exhaust air plenums and in the use of transfer grilles in corridor walls in buildings in Use Group I. Various codes prohibit or limit the use of such plenums and transfer grilles, and the applicable codes should be consulted at the pre-design stage.

e. Air inlets and outlets for each room or area where required. Air volume rates need not be shown on floor plans at this stage, however, if some are shown on a particular floor plan, all shall be shown on that plan.

f. Outline of all air plenums by zone or system.

g. Location and arrangement of all energy recovery systems.

h. Steam, condensate return, hot water supply and return, chilled water supply and return, condenser water supply and return, make-up water, and related piping mains and branches. Individual runouts to heating and cooling equipment, and required valves need not be shown on floor plans at this stage. However, if some are shown on a particular plan, all shall be shown on that plan.

i. Location and arrangement of outdoor air intake and exhaust or relief louvers, fuel fired equipment vents, chimneys.

j. Radiation, convectors, fan-coil units, wall, window, and above ceiling heating/air conditioning units.

k. Location of outdoor air intakes relative to exhaust fan discharges, plumbing vents, vacuum system vents, fuel-fired vents and chimneys, and similar terminals.

l. High efficiency (80% or higher) filters where required.

m. HEPA (99.97%) filters where required.

n. All standby pumps where required.

o. Flow direction arrows, or sizes for all piping mains, branches, and main trunk ducts.

p. Location of primary automatic temperature control equipment.

q. Location of connection of new to existing systems.

r. Roof plan showing all air intakes, exhausts, rooftop equipment, plumbing and other vents.

s. Primary equipment (boilers, pumps, fans, chillers, etc.) schedules showing the total capacities, ratings and design data. Show total supply, return and exhaust air for all HVAC systems.

## 7. Plumbing

a. Locations of all plumbing fixtures and equipment, medical gas, compressed air, vacuum, laundry, sterilizing, dietary, laboratory equipment. Include locations of medical gas containers and all containers containing toxic or flammable materials, e.g., ethylene oxide.

b. New hot, cold and return hot water, distilled and deionized water, non-potable water, and gas mains and branches; sanitary sewer, acid waste, storm sewer, and vent piping. All risers shall be shown, continued from floor to floor. Pipe enclosures shall be shown where required.

c. Required valves for the above need not be shown on floor plans at this stage. However, if some are shown on a particular plan, all shall be shown on that plan.

- d. Medical gas mains, risers and branch piping, including medical gas zone valve boxes alarms, and medical gas outlets.
  - e. Vacuum (suction) mains, risers, and branch piping, including zone valve boxes, and vacuum inlets.
  - f. Waste anesthesia gas evacuation system for anesthetizing locations.
  - g. Locations of connection of new existing systems.
  - h. Plumbing fixture schedule.
  - i. Runout piping to individual plumbing fixtures, medical gas outlets, vacuum inlets, sterilizing, dietary and laundry equipment need not be shown connected at this stage.
  - j. Individual drainage piping from fixtures and equipment need not be shown connected at this stage.
  - k. Major equipment (hot water heaters, pumps, etc.) showing total capacities, ratings and design data
  - l. Required and available water pressures.
  - m. Required and available water flow.
  - n. Calculated fixture unit totals.
8. Fire Protection (All information as per IBC 2009/NJ edition) including:
- a. Location of fire extinguishing systems, including water supply, meters, standpipe mains, risers and branch mains, and sprinkler system mains, risers and feed mains. Branch piping to sprinkler heads, and drain, relief, and overflow piping need not be shown at this stage.
  - b. Location of fire pumps, water storage tanks, fire department (siamese) connections, and related piping.
  - c. Location of fire hose cabinets, hose lengths, control valves, and fire department valves for standpipe system.
  - d. Location of all required sprinkler heads, control valves, and flow switches. Heads may be shown on reflected ceiling plans.
  - e. Location of alarm valves, check valves in sprinkler and standpipe systems.
  - f. Location of Gaseous Suppressant systems, dry chemical and containers.
  - g. Fire extinguishers (may be on fire protection or architectural plans).
  - h. Fire pump schedule noting GMP, head H.P., voltage.
  - i. Required and available water pressures.
  - j. Required and available water flow and source location.

9. Electrical

- a. Location of main distribution panel(s) with metering sections, switchgear, ground fault equipment protection if required, number of service disconnects, etc.
- b. Location of main switchboard, power and lighting panels, normal and emergency panels, and motor control centers.
- c. Power riser diagram showing all over current devices, feeder and conduit sizes and connection with the emergency electrical systems. Feeder and conduit sizes may be shown up to ground floor level for normal and emergency systems.
- d. Emergency electrical system with separation into life safety, critical and equipment branches identified in a single line riser diagram.
- e. Lighting and power plans shall show home runs to branch panels. Wire sizes and number of wires need not be shown at this stage.
- f. Locations of all fire alarms pull stations, fire and smoke detectors, and medical gas alarm stations. Duct detectors may also be shown on HVAC plans.
- g. General and emergency lighting fixtures, and illuminated exit signs.
- h. Special grounding systems for surgical suites, critical care units, and other areas where required (may be described in the outline specifications at this stage).
- i. Isolation transformers, isolation monitors for anesthetizing locations (may be described in the outline specifications at this stage).
- j. Location of Nurses call system devices and Communication System devices.
- k. Emergency generator and related equipment (automatic transfer switches, etc.).
- l. Ratings of all primary equipment (transformers, switchgear, transfer switches, generators, etc.).

10. Miscellaneous

- a. Locations and types of all energy recovery systems, incinerators, trash compactors, and miscellaneous systems or equipment.

11. Outline Specifications

- a. All sections to be included in the final specifications shall be outlined at this time to generally describe their participation in the scope of the work. Such descriptions shall be adequate for review purposes but need not be as detailed as those for construction purposes.
- b. Mechanical-Electrical

(1) General

HVAC, Plumbing, Fire Protection, Electrical and related specifications shall be provided. They shall include a general description of all required materials, systems and equipment including types.

(2) HVAC

General description of all primary equipment, piping and ductwork systems shall be included. Describe control systems and sequence of operation including fire emergency venting systems and smoke control systems where provided, fan shutdown upon fire alarm system actuation, or smoke condition.

(3) Plumbing

A general description shall be included for fixtures, domestic water heaters, fire extinguishing systems water, sewer, medical gas, vacuum and compressed air systems, laundry, food service and sterilizing equipment.

(4) Fire Protection

General description of sprinkler, standpipe, and other fire extinguishing systems including types of systems and major components. The design criteria to be used by the contractor to develop the shop drawings. Hazard classification of all rooms & spaces, water density & maximum area coverage by sprinkler & materials to be used. (Area density or Room design method).

(5) Electrical

- a) General description of electrical service including voltage, and type of service, whether overhead or underground.
- b) General description of electrical equipment.
- c) General description of transformers, motors, elevators, switchboards, cabinets, fixtures, and required grounding systems, nurses call systems, fire alarm and detection systems, emergency electrical systems, and communication and paging system.
- d) Describe wiring systems. Include wire types, conduits, raceways, and cables.

## **VI. PARTIAL APPROVAL**

In compliance with the Uniform Construction Code, State of New Jersey (hereafter N.J.A.C.) N.J.A.C. 5:23-2.16 Construction Permit-Procedure (g) Approval of Part: projects which satisfy the following requirements may be approved in part for early construction starts:

A. Request for approval of part shall be made prior to or concurrent with preliminary Submission.

B. Preliminary Submission for Approval of Part shall include all plans and documentation necessary to fully explain that scope of work limited to:

1. Demolition as required.
2. Site work (100%) less planting schedules and related, finished landscaping details.
3. Structural prints and calculations, 100% complete.
4. Floor and roof plans, exterior elevations, door and window schedules and wall sections as required to construction and enclose the new construction secure from the elements.

C. HCPR, upon approval of the Preliminary Submission may authorize such construction starts by letter and sealing and stamping a minimum of two sets of construction documents. Those sets shall be picked up by the Owner or authorized representative in order that they may become a part of the application for a construction permit.

## **VII. FINAL SUBMISSION – (Fully developed Contract Documents)**

### A. Documentation

1. Copies of requested/required letters of approval in addition to those listed under the Preliminary Submission, such as: a letter from physicist regarding shielding methods, letter from laboratory reviewer, etc. shall be submitted and accepted prior to the issuing of final approval.
2. Engineers Checklist (Attachment #2 as required by Health Care Plan Review Record).

### B. Construction Prints

1. The Site Plan (if applicable) shall be fully developed to indicate the complete scope of work in accordance with mandated codes, regulations, licensure standards and review comments.
2. Construction prints as required under the Preliminary Submission and any additional ones as needed to indicate the complete scope of work shall be fully developed in accordance with mandated codes, regulations, licensure standards, and review comments.
3. Mechanical-Electrical
  - a. General
    - 1) The final stage drawings shall include all information as required under ITEM IV, B., 4. through IV, B., 10. of the Preliminary Submission, and any additional information as necessary to show compliance with all applicable codes, regulations, licensure standards, and review comments.

This shall include but not be limited to the following:

- i. Complete site plan. (if applicable)

ii. HVAC:

- a) All ductwork.
- b) All air inlets, outlets, include types and sizes.
- c) All air volume rates at all inlets and outlets.
- d) All volume dampers, both manual and mechanical/electrical.
- e) All fire and smoke dampers.
- f) All smoke partitions, and two-hour fire rated partitions.
- g) All ductwork and piping sizes.
- h) All service valves.
- i) All pressure and temperature relief valves, low water cut off devices and other safety controls.
- j) All thermostats, humidistats, and control devices.
- k) ATC control diagrams.
- l) Flow diagrams.
- m) All relief, drain, vent piping and related valves.
- n) All overflow piping.
- o) Special or typical details (e.g. fire dampers in walls and floors, roof-top unit installation, etc.).
- p) Heat or smoke detectors for fan shutdown.
- q) Complete schedules, diagrams and details to determine that design, capacities, controls and performance of the various systems are in conformance with the applicable codes and regulations.

iii. Plumbing

- a) All shutoff or control valves.
- b) All safety devices.
- c) All relief, drain, vent and overflow piping.
- d) All drain valves.
- e) All air intakes and exhausts for vacuum system.
- f) Roof plan showing vents, roof drains.

- g) Backflow prevention devices, vacuum breakers, check valves.
- h) Medical gas outlets, vacuum inlets.
- i) Riser diagrams for water, sanitary sewer, medical gas and vacuum systems.
- j) All piping and services for special equipment, e.g. food services, laundry, sterilizing equipment, incinerators.

#### iv. Fire Protection

- a) All valves, including control, test and drain valves and check valves.
- b) All pump test headers, automatic ball drips, flow measuring devices, tamper switches, and control devices.
- c) All piping to sprinkler heads, except cross-mains and branches may not be shown.
- d) All test and drain piping.
- e) Riser diagrams for sprinkler and standpipe systems.
- f) Sufficient schedules, diagrams and details to determine systems are in accordance with the applicable codes and regulations.
- g) Hydraulically designed shop drawings along with calculation in accordance with NFPA 13 – 2007, 8-1 & 2

#### v. Electrical

- a) All electrical equipment and devices, light and power panels, transfer switches.
- b) Mounting heights for all switches, receptacles, thermostats, and fire alarm devices.
- c) Home-runs with wiring sizes and number of wires.
- d) Diagrams for grounding and special grounding systems to include wire sizes and groundings fittings.
- e) Capacities, ratings, details for isolation systems.
- f) Ratings for all over current protective devices.
- g) Site plan shall be fully developed with details of outdoor lighting including specific lighting fixture identification, service conduit and feeder sizing, duct detail, grounding detail, transformer details including mounting pad detail, and all other supporting service entrance details.

- h) All space smoke and heat detectors and their connections with fire alarm system.
- i) All duct heat detectors and smoke detectors required for fan shutdown. These detectors shall be shown connected with the fire alarm system in accordance with the N.F.P.A. and NJIBC.
- j) All electrical wiring details and connections to special equipment such as laundry equipment, food service equipment, HVAC equipment, sterilizing equipment.
- k) Magnetic door holders, audible and visual fire alarms devices.
- l) Lighting fixture schedule.
- m) Schedules of all panels showing number, sizes of wires, over current devices, and branch & panel loading.
- n) Nurse call system, with call lights, patient call stations, staff stations, emergency call stations.
- o) Riser diagrams for fire alarm and detection system, nurses' call, telephone and paging system.
- p) Fire Alarm construction documents in accordance with 907.1.1 of NJIBC 2009
- q) Ratings for all primary equipment, and other equipment not listed above.
- r) Location and installation detail of a fire pump system as may be required.

## C. Specifications

### 1. General

All sections shall be fully developed as required to supplement the construction prints and to describe types, sizes, finishes, workmanship and characteristics of all materials and equipment including manufacturers' or suppliers' recommendations for installation.

### 2. Mechanical and Electrical

a. Shall include detailed description of all materials, equipment, systems, system components, controls, control sequences, and characteristics or features. The contract documents shall be complete and shall call attention to all requirements of the codes. Specific attention is called for to the following.

- 1) Fire characteristics and ratings for insulation.
- 2) Testing and balancing of air and water systems. Written reports shall be submitted to Owner and Engineer.

- 3) All systems including the electrical system shall be tested and operated to demonstrate to the owner or his representative that the installation and performance of these systems conform to the requirements of the plans and specifications, and applicable codes.
- 4) Duct linings to comply with the codes.
- 5) Filters for HVAC systems.
- 6) Detailed description of electrical equipment and systems including but not limited to emergency electrical system, nurse call system, communication system, grounding system, any other special electrical system, transformers, generators, fire pumps, motors and motor control center, over current device, elevators, x-ray system, high voltage splicing, wiring methods and devices, etc.

## **VIII. FINAL APPROVAL**

When a Final Letter of Release has been issued, additional sets of contract documents may be delivered to the HCPR Unit for stamping. Those sets shall be picked up by the owner or authorized representative in order that they may become a part of the application for a construction permit.

## **IX. FEE CALCULATION**

### **FEE CALCULATION INSTRUCTIONS**

The following pages include the Plan Review Fee Schedule and the Volume Calculation Worksheet. The volume worksheet must accompany the Fee Schedule with your project review application for all new construction or additions. In case of both new construction plus renovations, a volume calculation worksheet for only the new construction must be submitted. The volume is used to complete Section 2C of the Fee Schedule. Cost of reconstruction, alteration, renovation, and repair, if any, is used to complete Section 2D of the Fee Schedule.

#### **General Instructions**

The following information is required on the Project Review Application, and to complete Section 2C of the Plan Review Fee Schedule:

**Use Group** (See building subcode, Article 3: Use or Occupancy)

- B .....Business
- I-1 ..... Institutional, residential
- I-2 ..... Institutional, incapacitated
- I-4 ..... Medical Daycare

**NOTE:** In healthcare buildings of the above noted Use Groups, some areas may be classified as other uses (A, E, F, H, R, S & U). In these cases, the primary Use Group of the building shall be used for fee calculation purposes

#### **Plan Review Fee Schedule**

Upon determining the use group and volume for new structures and/or total cost of renovation for existing ones, proceed to the Fee Schedule and enter all required information. Only those items pertaining to the particular project type need to be completed. Healthcare projects are separated on the Fee Schedule because their fees are different. If unsure as to whether a Healthcare review is required for all or a portion of the project, please contact the Bureau before completing the Schedule and remitting the fee. Please note that blank Fee Schedules may be duplicated and used for submissions of future projects, but the project review application must not be a duplicate.

Each section of the Fee Schedule contains instructions on how to complete it. If there is any question about fees, please request assistance when leaving plans for review, or call in advance [(609) 633-8151].

The enclosed Fee Schedule is not to be used to determine permit fees. Each municipality has a permit fee schedule established by local ordinance that will be used for this purpose. The municipality is required to credit the applicant an amount equal to 20 percent of their permit fee, since the plan review was performed by the Department rather than the local agency. If the project submitted for review is a State-owned facility, contact the State Buildings Unit for a State Buildings Permit Fee Schedule [609-633-6993].

## VOLUME CALCULATION WORKSHEET

In accordance with N.J.A.C. 5:23 - 2.28, "volume computation," the volume of the structure shall be calculated as follows:

**Structures with basements:** ( N.J.A.C. 5:23 - 2.28(b) 1) Height extending from basement or cellar floor to:

Top of the roof beams of a flat roof	_____	ft.
Mean height of a pitched roof	_____	ft.
Floor area	_____	sq. ft.
Total volume = floor area multiplied by height	_____	cu. ft.

**Structures without basements:** (N.J.A.C. 5:23 - 2.28(b)2 ) Height extending from one-fifth the distance from the first floor level to bottom of the footings—not exceeding 2-1/2 feet below the first floor level—to:

Top of the roof beams of a flat roof	_____	ft.
Mean height of a pitched roof	_____	ft.
Floor area	_____	sq. ft.
Total volume = floor area multiplied by height	_____	cu. ft.

**Open sheds:** (N.J.A.C. 5:23 - 2.28(c) ) The volume shall be measured within the perimeter of the roof for a height from the grade line to the mean roof level.

## **X. APPLICABLE CONSTRUCTION CODES, REGULATIONS and STANDARDS**

### **SOURCES**

For the NJAC/UCC :

New Jersey Department of Community Affairs  
Division of Codes and Standards  
Publications Unit  
P.O. Box 802  
Trenton, New Jersey 08625-0802 609-984-0040

For the NJIBC 2009, IMC 2009, IFGC 2009, IECC 2009 & NEC 2008 :

International Code Council, Inc.  
Publications  
4051 West Flossmoor Road  
Country Club Hills, IL 60478-5795 708-799-2300

For the NFPA Life Safety Code 101:

National Fire Protection Association  
11 Tracy Drive  
Avon, MA 02322 617-770-3000

For the NSPC 2009 :

National Association of Plumbing-Heating-Cooling Contractors  
P.O. Box 6808  
Falls Church, VA 22046-1148 1-800-533-7694

For the Manual of Standards :

New Jersey Department of Health & Senior Services  
Licensing & Certification  
P.O. Box 367  
Trenton, New Jersey 08625-0367 609-292-6552

For the “ FGI Guidelines” :

The American Society for Healthcare Engineering  
155 North Wacker Drive  
Chicago, IL 60606 1-800-242-2626

Construction Codes, Regulations and Standards for

## **FREE-STANDING AMBULATORY CARE FACILITIES - MRIs**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group B.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 3 AMBULATORY CARE FACILITIES, 3.1 Common  
Elements for Outpatient Facilities; 3.2 Primary Care Outpatient  
Centers or Section 3.3 Small Primary (Neighborhood) Outpatient  
Facilities; 3.4 Freestanding Outpatient Diagnostic and Treatment  
Facilities.

New Jersey Department of Health & Senior Services -  
Latest Edition of the Manual of Standards for Licensure of Ambulatory  
Care Facilities

Construction Codes, Regulations and Standards for

## **ADULT & PEDIATRIC DAY HEALTH CARE FACILITIES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group I-4.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 5 OTHER HEALTH CARE FACILITIES; 5.3 Adult Day  
Health Care Facilities

New Jersey Department of Health & Senior Services  
Latest Edition of the Manual of Standards for Licensure of Adult and  
Pediatric Day Health Care Facilities with Chapters 23 & 24

Construction Codes, Regulations and Standards for

## **ASSISTED LIVING RESIDENCES AND COMPREHENSIVE PERSONAL CARE HOMES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)  
100% Adaptable for ALF & 4% Accessible for CPC.

International Building Code, NJ Edition/2009 Use Group I-2.  
(NJAC 5:23-3.14)

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

New Jersey Department of Health & Senior Services:  
Latest Edition of the Manual of Standards for Licensure of Assisted Living  
Residences and Comprehensive Personal Care Homes

Construction Codes, Regulations and Standards for

## **FREE-STANDING AMBULATORY CARE FACILITIES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group B.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 3 AMBULATORY CARE FACILITIES, 3.1 Common Elements for  
Outpatient Facilities; 3.2 Primary Care Outpatient Centers or Section 3.3  
Small Primary (Neighborhood) Outpatient Facilities

New Jersey Department of Health & Senior Services  
Latest Edition of the Manual of Standards for Licensure of Ambulatory  
Care Facilities

Construction Codes, Regulations and Standards for

## **FREE-STANDING AMBULATORY CARE FACILITIES- BIRTHING CENTERS**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group B.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 3 AMBULATORY CARE FACILITIES, 3.1 Common Elements for  
Outpatient Facilities; 5.2 Freestanding Birthing Centers

New Jersey Department of Health & Senior Services  
Latest Edition of the Manual of Standards for Licensure of Ambulatory  
Care Facilities

Construction Codes, Regulations and Standards for

## **NURSING HOMES (LONG TERM CARE FACILITIES)**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group I-2.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 4 RESIDENTIAL HEALTH CARE FACILITIES; 4.1  
Common Elements for all Residential Health Care Facilities; 4.2  
Nursing Facilities

New Jersey Department of Health & Senior Services  
Latest Edition of the Licensing Manual of Standards for Long Term Care  
Facilities

Construction Codes, Regulations and Standards for

## **HOSPITALS (ACUTE CARE FACILITIES)**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group I-2.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 2 HOSPITALS; 2.1 Common Elements for Hospitals;  
2.2 General Hospitals

New Jersey Department of Health & Senior Services  
Latest Edition of the Manual of Licensing Standards for Hospital

Construction Codes, Regulations and Standards for

## **OUTPATIENT SURGICAL FACILITIES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 Use Group I-2 for those facilities within a Hospital and Use Group B for free standing facilities. (NJAC 5:23-3.14)

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010

Chapter 3 AMBULATORY CARE FACILITIES, 3.1 Common Elements for Outpatient Facilities; 3.7 Outpatient Surgical Facilities

Or (for in hospital)

Chapter 2 HOSPITALS, Section 2.2-3.3.1.3

(In Hospital) New Jersey Department of Health & Senior Services  
Latest Edition of the Licensing Standards for Hospitals

OR

(Free-Standing) Latest Edition of the Manual of Standards for Licensure of Ambulatory Care Facilities.

Construction Codes, Regulations and Standards for

## **PSYCHIATRIC HOSPITAL FACILITIES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group I-2.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 2 HOSPITALS; 2.1 Common Elements for Hospitals;  
2.5 Psychiatric Hospitals

New Jersey Department of Health & Senior Services  
Latest Edition of the Manual of Licensing Standards for Hospitals

Construction Codes, Regulations and Standards for

## **REHABILITATION HOSPITAL FACILITIES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group I-2.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 2 HOSPITALS; 2.1 Common Elements for Hospitals;  
2.6 Rehabilitation Hospitals

New Jersey Department of Health & Senior Services  
Latest Edition of the Manual of Licensing Standards for Rehabilitation  
Hospitals - Excluding Subchapters 23 and 24

Construction Codes, Regulations and Standards for

## **OUTPATIENT RENAL DIALYSIS FACILITIES**

Uniform Construction Code State of New Jersey, Title 5, Chapter 23,  
Subchapters 1 through 12.

Barrier Free Requirements per ICC/ANSI A117.1-2003 (NJAC 5:23-7.2)

International Building Code, NJ Edition/2009 (NJAC 5:23-3.14)  
Use Group B.

International Mechanical Code/2009. (NJAC 5:23-3.20)

International Fuel Gas Code/2009 (NJAC 5:23-3.22)

The National Standard Plumbing Code 2009 (NJAC 5:23-3.15).

The National Electrical Code 2008. (NJAC 5:23-3.16).

Life Safety Code NFPA 101-2000.

Air Conditioning and Ventilating Systems. (NFPA 90A-2009)

Guidelines for Design & Construction of Health Care Facilities/2010  
(NJAC 5:23-3.2)

Chapter 3 AMBULATORY CARE FACILITIES, 3.1 Common Elements for  
Outpatient Facilities; 3.10 Renal Dialysis Centers

(In Hospital) New Jersey Department of Health & Senior Services  
Latest Edition of the Licensing Standards for Hospitals

OR

(Free-Standing) Latest Edition of the Manual of Standards for Licensure of  
Ambulatory Care Facilities.