

Section Two

Existing Conditions

2.1 PROJECT LOCATION

The NIH Bethesda campus is located in Montgomery County, Maryland, approximately three miles north of Washington, D.C. (Figure 2-1). The Bethesda Central Business District is situated immediately to the south. The campus is bounded on the east by Rockville Pike (Maryland Route 355), a six lane arterial road that passes through a continuous commercial corridor extending from Bethesda to Gaithersburg, about four miles north of Rockville. Old Georgetown Road (Maryland Route 187) and West Cedar Lane form the western and northern boundaries, respectively (Figure 2-2).

The campus is in the Washington, D.C. metropolitan area. It is surrounded in all directions by solid urban and suburban development. This development extends four miles to the west of the campus, and much greater distances in other directions. The U.S. National Naval Medical Center shares frontage with NIH along Rockville Pike for most of NIH's eastern boundary. Single and multifamily residential neighborhoods lie on the other three sides. The Washington Metropolitan Area Transit Authority (Metrorail) Red Line route follows the alignment of Rockville Pike through the area. The Medical Center underground rail station, which also has surface bus transit service, is located on the east side of the campus.

2.2 NIH ORGANIZATION

NIH is part of the U.S. Department of Health and Human Services. The congressionally mandated mission of NIH is to provide leadership and direction to programs that improve the health of the people of the U.S. NIH seeks to accomplish its mission by:

- Fostering fundamental discoveries, innovative research, and their applications in order to advance the Nation's capacity to protect and improve health.
- Developing, maintaining, and renewing the human and physical resources that are vital to ensure the Nation's capability to prevent disease, improve health, and enhance quality of life.
- Expanding the knowledge base in biomedical and associated sciences in order to enhance America's economic well-being and ensure a continued high return on the public investment in research.
- Exemplifying and promoting the highest level of scientific integrity, public accountability, and social responsibility in the conduct of science.

The following is a partial list of organizations on the campus:

2.2.1 Office of the Director

- Director of NIH
Provides leadership and direction to NIH programs and activities in both scientific and administrative matters, and advises the Assistant Secretary for Health in the formulation of national health policy.
- Office of Management (OM)
Advises the Director and NIH staff on administration and management. Organizations within the Office of Management include the Office of Administration, Office of Human Resource Management, Office of Financial Management, Office of Research Services, and the Office of Research Facilities Development and Operations.

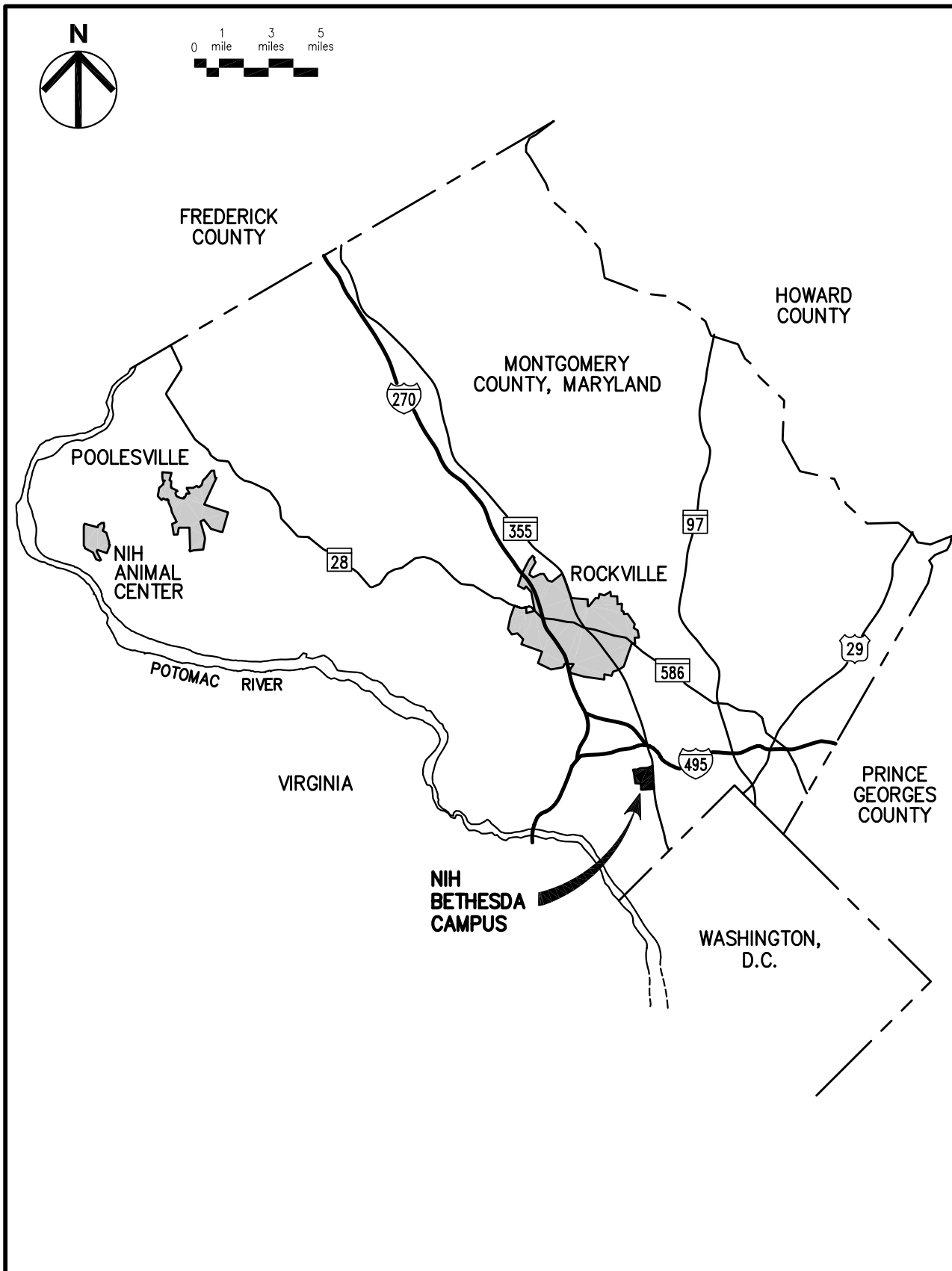


FIGURE 2-1 MONTGOMERY COUNTY LOCATION MAP.

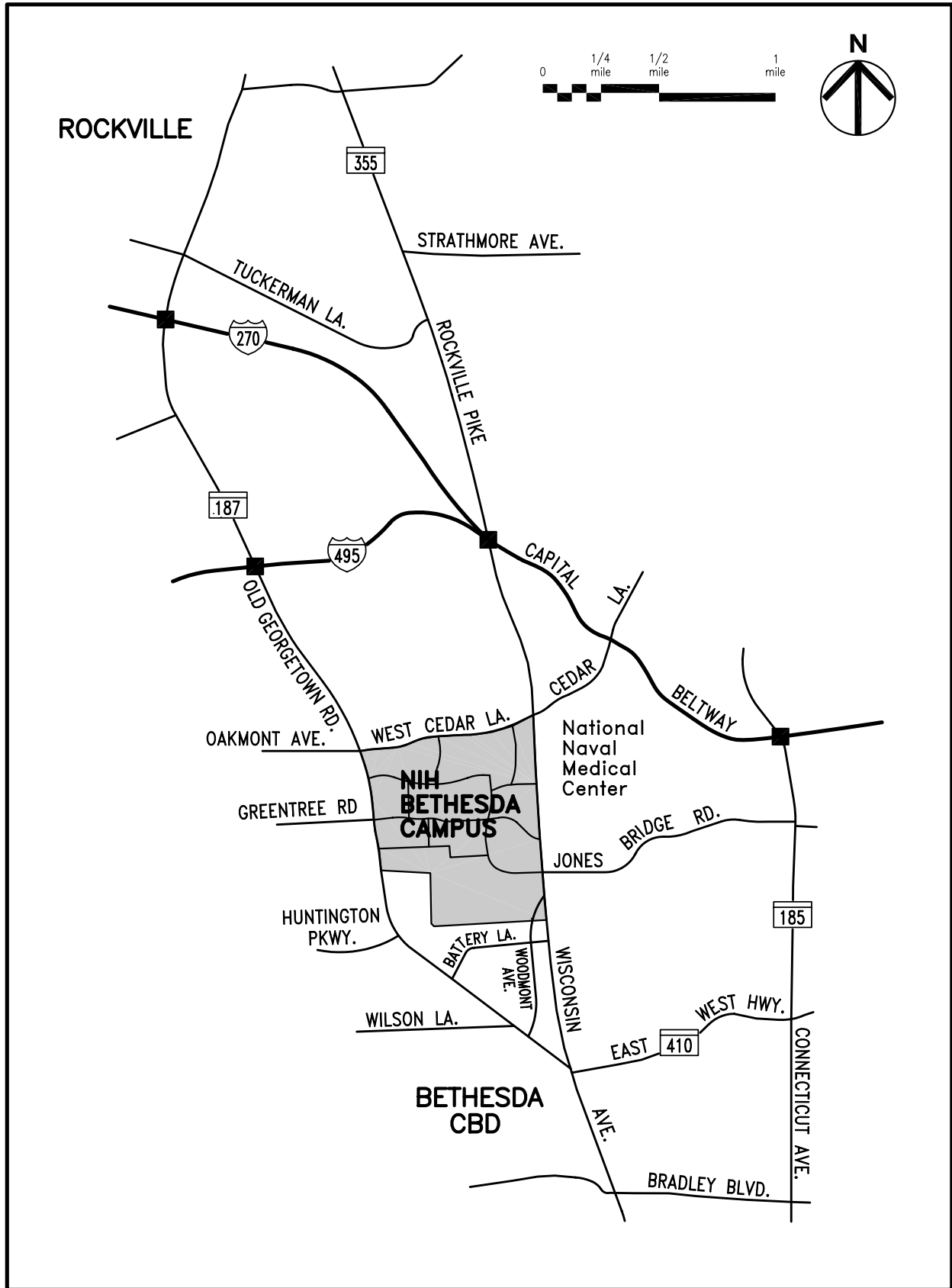


FIGURE 2-2 VICINITY MAP.

- Office of Extramural Research (OER)
On behalf of Director, provides guidance to NIH Institutes in research and training programs completed for NIH through extramural (grant, contract, cooperative agreement) programs.
- Office of Intramural Research (OIR)
Oversees and coordinates research, training, and technology transfer among the laboratories and clinics of NIH around the U.S.
- Office of Communications and Public Liaison (OCPL)
Advises NIH Director, and communicates information about NIH policies, programs, and research results to the general public, scientific community, and medical professionals.
- Office of Science Policy (OSP)
Advises the Director on policy issues, and participates in the development of new policy and program initiatives.
- Office of Disease Prevention (ODP)
Coordinates NIH activities regarding application of research to disease prevention, nutrition, and medical practice.
- Office of AIDS Research (OAR)
Formulates scientific policy for and recommends allocation of research resources for AIDS research at NIH.
- Office of Equal Opportunity and Diversity Management (OEODM)
Advises the Director and NIH staff on matters related to equal employment opportunity programs and policies.
- Office of Research on Women's Health (ORWH)
Advises the Director, formulates scientific policy, and recommends funding allocations for research specifically related to women.
- Office of Community Liaison (OCL)
Advises the Director on, and plans, directs, and manages activities to promote collaboration between NIH and the community. Ensures effective communication on NIH policy and programs involving the community.

2.2.2 Institutes (with date of inception)

- National Cancer Institute (NCI) (1937)
Conducts, supports, and coordinates research on detection, diagnosis, prevention, control, and treatment of cancer.
- National Heart, Lung, and Blood Institute (NHLBI) (1948)
Conducts and coordinates research in diseases of the heart, lungs, blood vessels, and blood, as well as their treatment and prevention. NHLBI also has administrative responsibility for the NIH Women's Health Initiative.

- National Institute of Dental and Craniofacial Research (NIDCR) (1948)
Conducts and coordinates research into infectious diseases and inherited disorders of the teeth, mouth, jaws, and face; their prevention; and normal oral and facial development.
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) (1948)
Conducts and supports research in diabetes, digestive diseases, nutrition, and obesity; endocrinology and metabolic diseases; and kidney, urologic, and hematologic diseases.
- National Institute of Allergy and Infectious Diseases (NIAID) (1948)
Conducts and supports research into diagnosing, treating, preventing and causes of infectious, immunologic, and allergic diseases including childhood diseases, sexually transmitted diseases, AIDS, asthma, and autoimmune disorders.
- National Institute of Mental Health (NIMH) (1949)
Conducts and coordinates research on diagnosis, treatment, and prevention of mental disorders and illnesses.
- National Institute of Neurological Disorders and Stroke (NINDS) (1950)
Conducts and supports research into more than 600 diseases and disorders that affect the brain and neurological system including Parkinson's, Alzheimer's, epilepsy, strokes, and head injuries.
- National Library of Medicine (NLM) (1956)
National repository of biomedical research and medical information with computer search facilities available to nation's physicians, research scientists, health care professionals, and the general public.
- National Institute of General Medical Sciences (NIGMS) (1962)
Conducts and supports basic research that is not targeted to specific diseases and disorders, or that is related to basic and general medical science.
- National Institute of Child Health and Human Development (NICHD) (1963)
Conducts and supports research into fertility, pregnancy, human growth and development, and pediatrics.
- National Eye Institute (NEI) (1968)
Conducts and supports research on the causes, natural history, prevention, diagnosis, and treatment of disorders of the eye and visual system.
- National Institute of Environmental Health Sciences (NIEHS) (1969)
Conducts research into health and human diseases resulting from genetic susceptibility, environmental factors, and time.
- National Institute on Alcohol Abuse and Alcoholism (NIAAA) (1970)
Conducts and supports research on the cause, treatment, and prevention of alcoholism and alcohol related problems, including studies in genetics, neurosciences, and pharmacological treatment.
- National Institute on Drug Abuse (NIDA) (1973)
Conducts research and provides national leadership on drug abuse and addiction focusing on causes, consequences, prevention, and treatment in biological, social, behavioral, and neurological areas.
- National Institute on Aging (NIA) (1974)
Conducts and supports research on the biomedical, social, and behavioral aspects of the aging process, and the prevention of age related diseases and disabilities.

- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) (1986)
Conducts and supports research on diseases and disorders of the joints, bones, muscles, and skin, rheumatology, orthopedics, dermatology; and sports medicine.
- National Institute of Nursing Research (NINR) (1986)
Conducts and supports research in patient care to establish a scientific basis for care across the life span.
- National Institute on Deafness and Other Communication Disorders (NIDCD) (1988)
Conducts and supports research on normal mechanisms and diseases and disorders of hearing, balance, smell, taste, voice, speech, and language.
- National Human Genome Research Institute (NHGRI) (1996)
Was established as the National Center for Human Genome Research in 1989. Conducts and supports research characterizing the human genome through mapping and sequencing of DNA, genetics, and technologies for genomic analysis.
- National Institute of Biomedical Imaging and Bioengineering (NIBIB) (2000)
NIBIB conducts and coordinates research that translates physical, chemical, and mathematical science and engineering principles into technical biomedical engineering and bioengineering development.

2.2.3 Centers

The following Centers are principally involved with research.

- Warren G. Magnuson Clinical Center (1953)
Provides patient facilities and services for clinical investigation and trials in 270 bed research hospital; conducts research in clinical care, hospital administration, and related areas. The Magnuson Clinical Center will be replaced by the Mark O. Hatfield Clinical Center in 2004.
- Fogarty International Center (FIC) (1986)
As the organizational focus for NIH's international activities, FIC promotes collaborative research on causes and prevention of diseases of global impact, and disseminates NIH findings internationally.
- National Center for Research Resources (NCRR) (1990)
Conducts research on human, animal, technological, and other resources used in biomedical research with emphasis on biomedical technology, clinical research, and research infrastructure.
- National Center for Complementary and Alternative Medicine (NCCAM) (1999)
Previously, the Office of Alternative Medicine which was established in 1993. Studies and disseminates information on complementary and alternative therapies in the context of rigorous science.
- Center for Scientific Review (CSR) (2000)
Previously the Division of Research Grants, which was established in 1946. The Center supports the Office of the Director in the formulation of research grant policies and procedures, administers peer review of extramural research and manages and monitors research grants and fellowships.
- National Center on Minority Health and Health Disparities (NCMHD) (2000)
Previously the Office of Research on Minority Health. The Center has overall responsibility for coordinating NIH policies, goals, and objectives related to minority research and training programs. Conducts and coordinates research on minority health.

- Center for Information Technology (CIT) (2000)

Established as a Division in 1964, the Center coordinates and manages information technology, conducts computational bioscience research, and develops and maintains NIH computer networks and systems.

2.3 EXISTING NIH FACILITIES

Administrative headquarters for NIH are located on the 310 acre Bethesda campus, which is also the focus for clinical research conducted by NIH scientists and physicians. About 17,500 people work on the campus including NIH employees, visiting research fellows, intramural research trainees, and contractor personnel who operate cafeterias, banks, and other services, collect wastes of all types, and provide janitorial services. Approximately 60% of all NIH employees in the U.S. work on campus. Over 8,000 of the workers are scientists/physicians or postdoctoral trainees involved directly with research.

These employees work in about 50 major and 25 minor buildings that have a floor area of about 7,400,000 gross square feet (gsf) (Figures 2-3, 2-4 and Table 2-1). See Appendix A for larger scale site mapping of the existing campus with site topography.

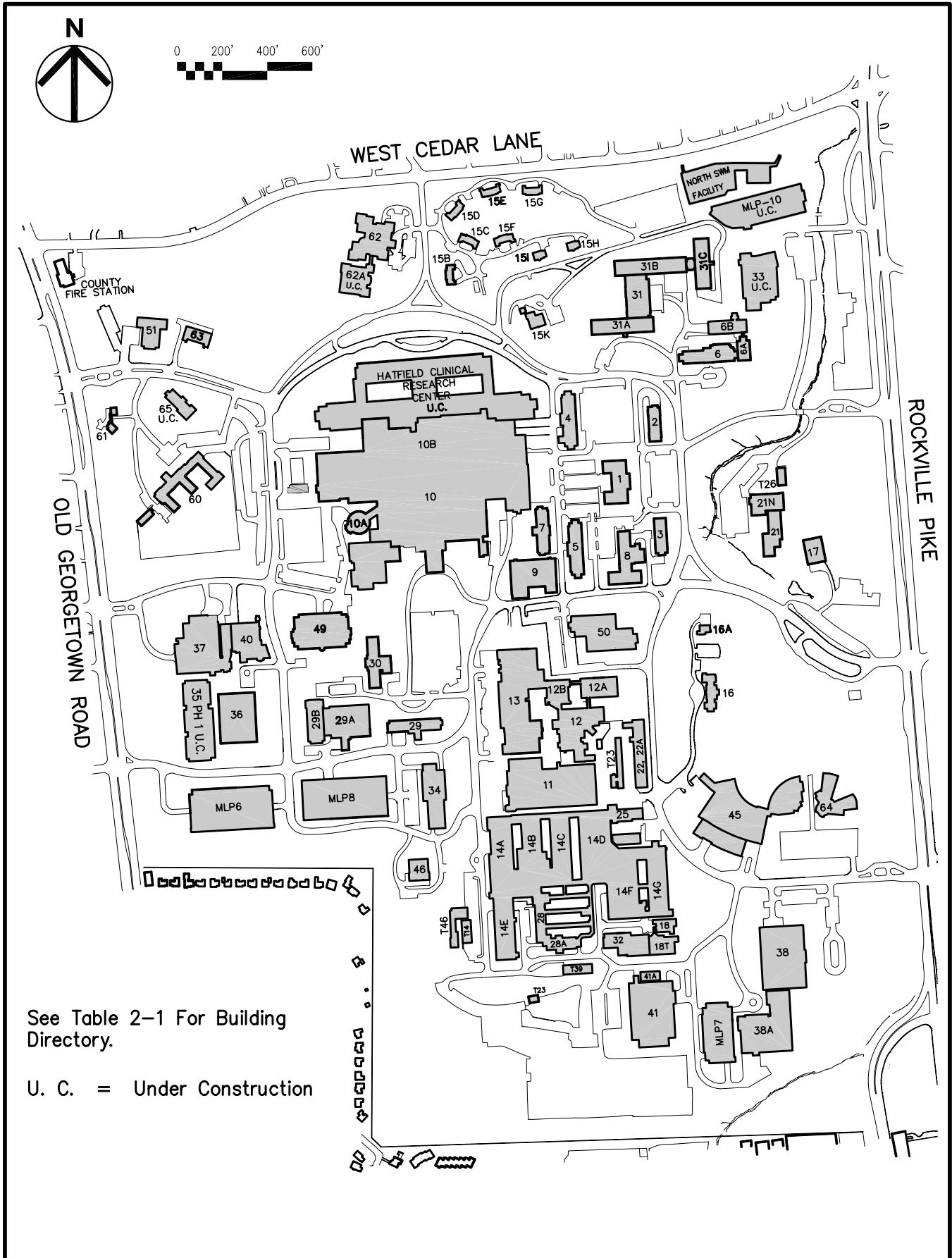
The focal point of the campus is the Warren G. Magnuson Clinical Center, a 270-bed research hospital with laboratories, where clinical trials involving direct application of biomedical science and experimentation to volunteer patients take place. The original section of the Clinical Center, Building 10, was opened in 1953, but many wings and annexes have been attached over the intervening years. About 6,500 workers are employed in the 2,385,000 gross square feet (gsf) complex, which also has an additional 568,000 gsf of underground parking. About 4,000 of the Clinical Center staff are engaged in research or its support, and about 2,000 support the hospital program. The Building 10 complex ranges from 8 to 14 stories in height.

The Clinical Center Complex encompasses facilities in Building 10, the Ambulatory Care Research Facility, and the new Mark Hartfield Clinical Research Center, which will replace the Magnuson Center. It is surrounded on the east and southwest sides by Institute buildings that conduct basic research and support clinical research in the Clinical Center. The buildings to the east of the Clinical Center Complex are part of the original NIH development and are generally three to five stories in height. Those to the southwest are newer, and are six to eight stories in height.

Most of the campus administrative offices are located in the eastern sector of the campus. The largest concentration of offices are in the 7 to 11 story Building 31 complex in the northeast corner of the campus. Building 45, the Natcher Building, on the east side of the campus provides 245,000 gsf for administration and conference space in a six story structure. The National Library of Medicine is located to the south of the Building 45 site. Building 82, which is not included in the master planning process, is located in the southwest quadrant of the West Cedar Lane/Old Georgetown Road intersection outside the limits of the Bethesda campus proper. It is a small two story office building donated to NIH by the Bloch family for administration of cancer research.

Animal holding and care facilities are concentrated in Buildings 14 and 28 on the south side of the campus. These buildings are sprawling single story structures. Many of the research buildings built since 1995 also contain animal holding areas.

The largest support facility is the central heating and refrigeration plant located in Building 11 in the core area of the campus. Also identified as the "power plant" in this document for brevity, Building 11 houses boilers which generate steam for heating most of the campus buildings as well as for building humidity



See Table 2-1 For Building Directory.

U. C. = Under Construction

FIGURE 2-3 EXISTING NIH BUILDINGS.

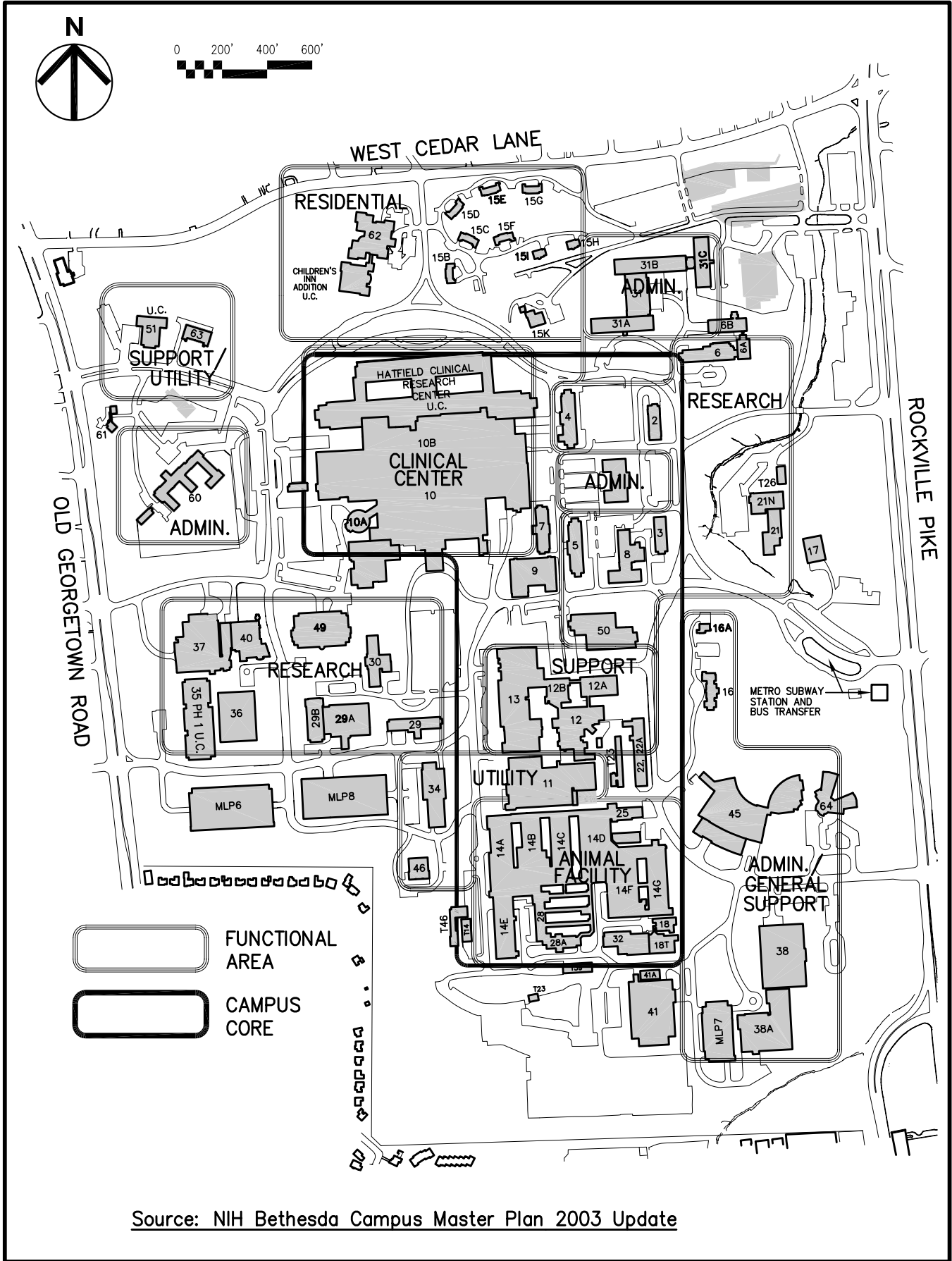


FIGURE 2-4 GENERAL NIH FUNCTIONAL AREAS.

Bldg. Number	Function	Bldg. Number	Function
1	Headquarters Administration	31 A, B, C	Administration
2	Administration Offices	32	NICHHD Research
3	NHLBI Research	34	Refrigeration Plant No. 2
4	NIAID Research	36	NCI/NHLBI/NICHHD/NIDCD/ NIMH/NINDS Research
5	NIDDK Research		
6, 6A&B	NEI/NIAMS/NICHHD Research	37	NCI Research
7	NIAID Research	38	National Library of Medicine
8	NIDDK Research	38A	Lister Hill National Center
9	NIMH/NINDS Research	40	Vaccine Research Center
10	Magnuson Clinical Center	41	NCI Virus Research
10A	MRI Facility	41A	Laboratory
10B	Ambulatory Care Research Facility	45	Office Building & Conference Center
11	Central Boiler/ Refrigeration Plant No. 1	46	NIH/PEPCO Substation
12	CIT, Gov't Vehicle Garage	49	Child Health and Neurosciences Laboratory
12A	CIT Offices		
12B	CIT	50	Louis Stokes Research
13	Support Services Building	51	Fire Station
14	Animal Facility	60	Mary Woodard Lasker Center
15B	Office	61 & 61A	Office/Storage
15 C,D,E, F,G,H,I	Residential Staff Quarters	62	Children's Inn
15K	Research	63	North Electric Substation
16 & 16A	Fogarty International Center	64	East Child Care Center
17	NIH/PEPCO Substation	T2	Storage
18 & 18T	NICHHD Research	T14	Storage
21	Radiation Safety Facility	T23	Grounds Maintenance Storage
21A	Hazardous & Radioactive Waste Management Facility	T39	Fitness Center
22 & 22A	Grounds Maintenance Support Facility	T46	Southwest Child Care Center
25	Waste Management	MLP	Multilevel Parking Garages
28	Animal Facility	33*	Research Building
29	FDA Research	35*	Neuroscience Research Center Phase I
29 A & B	FDA Research	62*	Children's Inn Addition
30	NIDCR Research	65*	Family Lodge
		CRC*	Hatfield Clinical Research Center

* Under Construction
Note: See Table 4-1 for building areas and types.

TABLE 2-1 NIH BUILDING DIRECTORY.

control, equipment sterilization, steam cleaning of animal facilities, and lab bench use. Building 11 also contains chillers and cooling towers which produce chilled water for summer air conditioning of buildings and for laboratory use and cold rooms throughout the year. Building 34 houses six older chillers that were installed in 1952 when chilled water demands created by campus growth temporarily exceeded the capacity of chillers in Building 11. NIH shops, support personnel offices, and warehouse storage are located in Building 13, a three story structure to the north of the power plant. The Building 21 complex on the east side of the campus south of Wilson Drive houses treatment, storage, and disposal facilities for radioactive, chemical, and mixed wastes. Building 21 is two stories in height.

The north central portion of the campus is a residential area. Small children and adolescents who are long-term patients at the Clinical Center can obtain temporary relief from the hospital environment with their families in the Children's Inn on the west side of West Drive. NIH senior staff residences are located to the east of the Children's Inn.

Seven building projects are currently in various stages of construction.

- The Mark Hatfield Clinical Research Center located on the north side of Building 10. It will replace the existing research hospital in the Magnuson Clinical Center with a 240-bed hospital for clinical research.
- The Neuroscience Research Center, Phase I, located on the west side of the campus.
- Building 62A, an addition to the Children's Inn, on the northern periphery of the campus.
- Building 65, the Family Lodge, which will house families of patients staying in the Children's Inn or the Clinical Research Center hospital for extended periods. It is located to the west of the Clinical Center.
- Multilevel Parking Lot 9 (MLP-9) on the west side of the Clinical Center.
- MLP-10 located in the northeast corner of the campus.
- Building 33, a new research laboratory, which is also located in the northeast corner.

Occupancy of the first six projects is scheduled for 2004. Building 33 is scheduled to open in 2005.

The campus "core" is an area with comparatively low topographic relief. The southern portion of the core is located on fill placed in the original NIH Stream valley. Existing buildings and utilities are densely concentrated in the core area. Virtually all of the core area has been disturbed by prior construction, or is located on an extensive fill that has buried the NIH Stream valley as it crosses the campus.

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