

STATE ENVIRONMENTAL QUALITY REVIEW ACT NEGATIVE DECLARATION NOTICE OF DETERMINATION OF NON-SIGNIFICANCE

Date:May 9, 2023Lead Agency:Dormitory Authority of the State of New York
515 Broadway
Albany, New York 12207-2964Applicant:Columbia University
615 West 131st Street

This notice is issued pursuant to the *State Environmental Quality Review Act ("SEQRA")*, codified at Article 8 of the New York Environmental Conservation Law ("ECL"), and its implementing regulations, promulgated at Part 617 of Title 6 of the *New York Codes, Rules and Regulations ("N.Y.C.R.R.")*, which collectively contain the requirements for the *State Environmental Quality Review ("SEQR")* process.

New York, New York 10027

(New York County)

The Dormitory Authority of the State of New York DASNY ("DASNY"), as lead agency, has determined that the Proposed Action described below would not have a significant adverse effect on the environment and a Draft Environmental Impact Statement ("DEIS") will not be prepared.

| Title of Action: | Columbia University 2023 Bond Financing (Independent Colleges and Universities Program) |
|------------------|---|
| SEQR Status: | Type I Action – 6 <i>N.Y.C.R.R</i> . Part 617.4(b)(6)(vi) and (9) |
| Review Type: | Coordinated Review |

Description of Proposed Action and Proposed Project

The Dormitory Authority of the State of New York ("DASNY") has received a funding request from Columbia University for its *2023 Bond Financing* (the "Proposed Project"), pursuant to DASNY's Independent Colleges and Universities Program, and would include the construction of an approximately 177,000-gross-square-foot ("gsf"), 34-story, mixed-use residential and commercial building to house graduate students and faculty members at 600 West 125th Street in the borough of Manhattan, New York County, New York, on the southwest corner of 125th Street and Broadway, across from the Manhattanville campus ("New Mixed-Use Residential Building").

In addition, Columbia University's 2023 Bond Financing would also be used to finance or refinance all or a portion of the cost of various institution-wide renovation, rehabilitation, equipment purchase, design and refinancing projects located in buildings or facilities throughout the Columbia University system, at or in the vicinity of its Manhattanville, Morningside Heights, and Irving Medical Center campuses in the Borough of Manhattan, New York County, New York. The bond funds would also be used to refund all or a portion of DASNY's outstanding Columbia University Insured Revenue Bonds, Series 2011A (the "Series 2011A Bonds").

For purposes of the New York *State Environmental Quality Review Act ("SEQRA")*, the Proposed Action would consist of DASNY's authorization of the issuance of one or more series of fixedand/or variable-rate, tax-exempt and/or taxable Series 2023 bonds in an amount not to exceed \$325,000,000 to be sold at one or more times through a negotiated offering and/or a private placement, on behalf of the University, for the Proposed Project.¹

More specifically, the new facility would include of the continued construction of an approximately 34-story, mixed use residential and commercial building to house graduate students and faculty members on the southwest corner of 125th Street and Broadway in Manhattan. The new facility would be approximately 391 feet tall and be comprised of approximately 177,000 gsf, and include approximately 142 apartments, with approximately 5,000 gsf of retail space on the ground level. The new facility is expected to be certified LEED Gold, with notable sustainability features including a high-performance façade, optimized equipment efficiency, and limited gas usage to achieve long-term carbon emissions reductions, vegetated roofs, stormwater detention, and wellness considerations. The new building was designed by Renzo Piano Building Workshop and CetraRuddy Architecture and is being developed by the Trustees of Columbia University.

The new building would be developed as of right and is currently under construction. The New York City Department of Environmental Protection ("NYCDEP"), in conjunction with the New York State Department of Environmental Conservation ("NYSDEC"), issued a dewatering permit for over 10,000-gallons a day. The new building commenced in 2021 and is expected to be completed in 2024.

¹ Approximately \$200 million of the 2023 bond proceeds would be used to finance, refinance and/or reimburse Columbia University for the design and construction costs associated with the Proposed Project and other various projects throughout the Columbia University system, and approximately \$125 million would be used to refund all or a portion of the Series 2011A Bonds.

Columbia University is a privately endowed, nonsectarian, nonprofit institution of higher education. Known originally as King's College, the University was founded under a charter granted in 1754 by King George II. Today, the University is one of the largest private institutions of higher education in the United States. Instruction and research are carried out in 17 component schools located at three primary sites in New York City and several additional sites outside the City. The University is formally affiliated with several neighboring institutions, including Barnard College, Teachers College and Union Theological Seminary.

The University offers degree and certificate programs through 17 faculties and schools, consisting of Columbia College, its original school, the School of General Studies (a liberal arts college for non-traditional students), and the 15 professional or specialized divisions whose programs supplement the liberal arts curricula. The University offers bachelor's degrees in 95 subject areas, master's degrees in 239 subject areas, doctoral degrees in 91 academic fields, and 75 certificate programs.

The University's professional and specialized divisions include the schools of Columbia University Irving Medical Center, the School of Law founded in 1858, the Fu Foundation School of Engineering and Applied Science founded in 1864, the Graduate School of Arts and Sciences founded in 1820 and the Graduate School of Business founded in 1916. Columbia University's Irving Medical Center comprises the University's College of Physicians and Surgeons founded in 1767 (the second oldest medical school in the country and the first to grant an M.D. degree), the School of Nursing founded in 1892, Mailman School of Public Health founded in 1922, and the College of Dental Medicine founded in 1916.

The University is a member of numerous professional associations, including the Association of American Universities, and is accredited by the Middle States Commission on Higher Education. In addition, ten of its professional schools hold separate accreditation from their respective professional associations. On January 18, 2023, Columbia named Nemat "Minouche" Shafik as the next President of the University, replacing Lee C. Bollinger who will be stepping down at the end of the 2022-23 academic year.

Reasons Supporting This Determination

Overview. DASNY completed this environmental review in accordance with the procedures set forth in the *State Environmental Quality Review Act ("SEQRA")*, codified at Article 8 of the New York *Environmental Conservation Law ("ECL")*, and its implementing regulations, promulgated at Part 617 of Title 6 of the *New York Codes, Rules and Regulations ("N.Y.C.R.R.")*, which collectively contain the requirements for the *SEQR* process. Generally accepted industry standards with respect to environmental analysis methodologies and impact criteria for evaluating the Proposed Project were employed to assess potential impacts.

The Proposed Project was also reviewed in conformance with the *New York State Historic Preservation Act of 1980 ("SHPA")*, especially the implementing regulations of Section 14.09 of the *Parks, Recreation and Historic Preservation Law ("PRHPL")*, as well as with the requirements

of the Memorandum of Understanding ("MOU"), dated March 18, 1998, between DASNY and the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP").

Additionally, the Proposed Project was analyzed for consistency with the State of New York *Smart Growth Public Infrastructure Policy Act ("SGPIPA")*, Article 6 of the New York *ECL*, for a variety of policy areas related to land use and sustainable development. The *Smart Growth Impact Statement Assessment Form ("SGISAF")* is included with this determination.

The project site for the new building is located within the designated boundaries of New York State's Coastal Zone. As such, the Proposed Project's consistency with the policies set forth in the New York State Department of State's Coastal Zone Management Program ("CZMP") and New York City's Local Waterfront Revitalization Program ("LWRP") was assessed in accordance with the coastal policies set forth in Section 600.5 of 6 *N.Y.C.R.R.* Part 617.

SEQRA. The New Mixed-Use Residential Building component of the Proposed Project constitutes a Type I action as specifically designated by 6 *N.Y.C.R.R.* 617.4(b)(6)(vi) and (9) of the *SEQR* implementing regulations. On April 7, 2023, DASNY circulated a lead agency request letter, including a *Full Environmental Assessment Form ("FEAF") Part 1* that was prepared for the New Mixed-Use Residential Building project component by representatives of Columbia University, as well as a *Distribution List of Involved Agencies and Interested Parties* to whom the lead agency letter was sent. There being no objection to DASNY assuming *SEQR* lead agency status, a coordinated review among the involved agencies was initiated.

DASNY representatives reviewed the *FEAF Part 1*, including relevant supplemental documentation that analyzed potential environmental impacts associated with the New Mixed-Use Residential Building project (see attached). DASNY representatives discussed the New Mixed-Use Residential Building project's environmental effects with representatives of Columbia University, as well as representatives of the involved agencies. DASNY subsequently completed an evaluation of the magnitude and importance of project impacts, as detailed in the *FEAF Parts 2 and 3* (see attached). Based on the above, and the additional information set forth below, DASNY as lead agency has analyzed the relevant areas of environmental concern and determined that the New Mixed-Use Residential Building project would not have a significant adverse effect on the environment.

General Findings. The project site for the new building is located within New York City's R8 High-Density Residential District with a C2-4 commercial overlay. The new building is a permitted use in this district and would be constructed as-of-right. The new building project site is also adjacent to the Manhattanville Mixed-Use Special District, which allows greater density, and a wider variety of land uses to facilitate commercial and residential development, encourages active ground floor uses, provides east-west visual and pedestrian connections, and requires publicly accessible open spaces, sidewalk amenities, sidewalk widening and landscaping. It also allows for the planned expansion of Columbia University into a new campus, of which the proposed new building is a part. The new building project site is also located in an urban area with existing access to public transportation and municipal infrastructure (i.e., water supply and sewer service). It is not expected to increase traffic significantly as most employees would be local residents with an average commute time of ten minutes, and the building is within walking distance (1/2 mile) via existing sidewalks to public transportation.

There would be no adverse impact to any aquatic resources or wildlife species from the Proposed Project. An initial screening with the Environmental Assessment Form ("EAF") Mapper identified peregrine falcon as occurring in the vicinity of the new building project site, however NYSDEC has concluded that construction of the new building would not impact peregrine falcons that nest nearby.

There would be some impacts on land related to construction activities at the new building project site. Excavation for the foundation, grading, and general site preparation, which would mostly consist of previously disturbed soil and asphalt pavement, has been completed. Construction activities would be more than 1 year in duration. Construction of the new building commenced in 2021 and is expected to be completed in 2024.

No significant adverse impacts were identified to either the quality or quantity of ground or surface waters from the temporary dewatering at the new building project site. The NYCDEP, in conjunction with the NYSDEC, issued a dewatering permit in summer of 2022 to facilitate the excavation and installation of foundation structures, elevator pits and mechanical pits for the construction of the proposed building, with a maximum withdrawal of 720,000 gallons per day.² The permit allowed for pumped groundwater to be directed to an existing combined sewer on West 125th Street, between Broadway and St. Clair Place at West 129th Street in Manhattan that leads to the North River Water Resource Recovery Facility prior to discharge to receiving surface waters. The dewatering activities have been completed.

The proposed new building would include state-regulated air emission sources. Mobile sources during project operations would include the use of heavy equipment, fleet and/or delivery vehicles. Stationary sources during construction would be temporary in nature and would include equipment typical for residential construction in Manhattan. The proposed new building would be equipped with five, natural-gas-fired boilers at 6,000 CPH each, with one on standby unit, that meet the New York City Building Code requirements. The proposed new building is not expected to require any federal or state air emission permits or emit greenhouse gases above permissible regulatory levels.

The new multi-use facility would occur on or adjacent to a historic or cultural resource. According to the New York State Historic Preservation Office's ("SHPO's") Cultural Resource Information System ("CRIS"), the new building project site is not within an Archaeological Sensitive Area, but it is adjacent to the Tiemann East Historic District, which is eligible for listing in the State and National Registers of Historic Places ("S/NR"). As described below under "*SHPA*", the proposed new building would have no impact on historic or cultural resources in or eligible for inclusion in the S/NR.

The new building project site is in an urban setting with high density and was previously occupied by a McDonald's restaurant, drive-through and parking lot. The proposed new building is similar

² Groundwater was treated and discharged in accordance with existing NYCDEP SPDES permit #NY0026247 and in accordance with State/Federal regulations for water quality and technology-based effluent limits.

in use to those in the surrounding area and is aesthetically similar to other buildings in the Manhattanville campus.

Environmental investigations were completed to address several Recognized Environmental Conditions ("RECs") identified at the new building project site, including NYSDEC Spill Case No. 9302776 that was issued on June 1, 1993, for the release of gasoline into the surrounding soil. A Soil Management Plan ("SMP") was prepared and implemented to render the new building project site protective of public health and the environment consistent with the contemplated end use. Remedial action conducted at the new building project site was completed in compliance with all applicable environmental standards, criteria and guidance and applicable laws and regulations.

<u>Potential Impacts</u>. DASNY, as lead agency, has inventoried all potential resources that could be affected by the Proposed Project, assessed the magnitude, duration, likelihood, scale, and context of the construction and determined that no impact, or a small impact, may occur to the following: Land Use, Zoning and Public Policy, Socioeconomics, Community Facilities, Open Space and Recreational Facilities, Cultural Resources, Architectural Design and Visual Resources, Neighborhood Character, Natural Resources, Hazardous Materials, Infrastructure, Solid Waste and Sanitation Services, Use and Conservation of Energy, Transportation, Air Quality, Noise and Construction (see *FEAF Part 2 and 3, attached*). No potential negative long-term or cumulative impacts or significant adverse environmental impacts were identified in connection with the Proposed Project.

The proceeds of DASNY's bond issuance would also be used to finance and/or reimburse the University for various construction, renovation, deferred maintenance, and replacement projects located at various facilities throughout the Columbia University system, including Columbia's Manhattanville, Morningside Heights and Irving Medical Center campuses located in the borough of Manhattan, New York County, New York.

Representatives of the University completed a series of Project Documents that detail each of the Proposed Project activities. The following is a summary list of eligible projects that may be funded from DASNY Series 2023 bond proceeds:

Manhattanville Campus. The proposed financing would include the reimbursement for costs associated with the completed design, development, construction, renovation, equipping, and/or furnishing, related demolition, site preparation, improvements, and utility work, at the following buildings or facilities on the Manhattanville Campus. The location of the project sites lie within the area bounded by Tiemann Place to 134th Street and from Broadway/Old Broadway to 12th Avenue from Broadway to 12th Avenue, to be used for academic and research purposes. The following projects have been completed:

 Phase II Foundation and Central Below Grade Service Facility: Construction of Phase II of a multilevel, interconnected central underground service facility, including foundations and infrastructure required to house a central loading facility, support spaces for the Columbia Business School buildings, and the extension of the central energy plant infrastructure, utilities, telecommunication equipment and additional support spaces serving above ground facilities.

- Columbia Business School and Underground Foundations (645-665 West 130th Street): Construction, furnishing and equipping of all systems required to complete the approximately 492,000-gross-square-feet ("gsf") Columbia Business School buildings and underground foundations located between West 130th Street to West 131st Street from Broadway to 12th Avenue.
- Central Energy Plant ("CEP") Phase II Expansion: Construction of all systems required to complete the expansion of the CEP providing heating, cooling and emergency electrical service to serve the Columbia Business School buildings and surrounding facilities.
- Phase II Open Space: Construction of an approximately 40,000-gsf, midblock open space "Large Square" located on the block between 131st and 132nd Streets, between the Columbia Business School buildings, including landscaping and woodland walk and the full complement of mechanical, electrical and plumbing systems to support the project.

It has been determined that these project components were previously reviewed under *SEQRA* and have not changed from the previous *SEQR* process and, therefore, no further environmental review by DASNY is required.³

The Proposed Project would also include the following project components at the Manhattanville Campus:

- Studebaker Building (615 West 131st Street): Roof replacement and façade repairs, including parapet reconstruction and other masonry repairs. This project is currently under construction. Phase I façade and abatement work is anticipated to be completed by December 2023, and Phase II roof replacement to be completed by the Fall 2024.
- Nash Building (3280 Broadway): Building infrastructure upgrades, including new fire alarm system, elevators, emergency generator, and associated work. This project has been completed.

Morningside Heights Campus. The Proposed Project would include the following renovation projects in buildings or facilities on the Morningside Heights Campus, located within the area

³ Certain projects included in this Columbia University 2023 Series Financing Project were previously reviewed under SEQRA as part of the Columbia University Series 2015 Financing Project (see DASNY's SEQR Determination for the 2015 Financing Project and DASNY's Findings Statement for the Continuation of Phase I Components of the Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development Project dated March 9, 2015). These projects, as well as other project components included in this bond financing, were also reviewed as part of the SEQR documentation for the Columbia University 2016, 2017, 2018, and 2020 Bond Financings dated March 3, 2016, January 10, 2017, April 9, 2018, and February 4, 2020, respectively. The construction of the Manhattanville projects is described in detail in Chapter 21, "Construction," of the Final Environmental Impact Statement ("FEIS") for the Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development Project (dated November 16, 2007) prepared by AKRF, Inc. on behalf of Columbia. The FEIS, which was reviewed and approved by the New York City Planning Commission ("CPC") on November 26, 2007 (Resolution №. C070495ZMM and №. N 070496 ZRM) and by the New York City Council on December 19, 2007 (Resolution №. 1201-2007), covered the entire Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development Project. However, only the project components that would be financed by DASNY with the proceeds of the 2023 Bond Series are reviewed and discussed herein.

bounded by 110th Street and 122nd Street from Morningside Drive to Riverside Drive, to be used for academic, residential, research and administrative purposes:

- Fairchild Hall, 700 Level (1212 Amsterdam Avenue) and Northwest Corner Building, 1100 Level Arts and Sciences (550 West 120th Street): Renovation of approximately 7,100 gsf of existing laboratory space in the Department of Biological Sciences at Fairchild Hall for academic/research purposes and the temporary use of lab space in room 1103C in the Northwest Corner Building during the design and construction of the permanent laboratory. This project has been completed.
- A&S Mudd Hall, 700 Level (500 W 120th Street): Renovation of approximately 4,355-gsf of existing wet laboratory space (Barnhart and Duvall Labs) in the Department of Biological Sciences, including asbestos abatement, demolition, new furniture, new partitions, doors, ceilings, lighting fixtures, electrical and IT distribution, HVAC unit upgrades, plumbing work, laboratory equipment, sprinklers, a new fire alarm and other life safety systems. This project has been completed.
- Northwest Corner Building, 1100 Level (550 West 120th Street): Renovation of approximately 2,670 gsf of laboratory and support space in the Physics Department for research purposes (McIver Lab). This project is currently in progress and is anticipated to be completed May 2024.
- Pupin Hall, 10th Floor, and Nevis Cyclotron Building, 1st Floor (538 West 120th Street): Renovation of existing laboratory and academic space including approximately 3,106 gsf of lab space on the 10th floor of Pupin Hall and approximately 700 gsf of clean room and equipment space on first floor of the Nevis Cyclotron Building. This project is currently in progress and is anticipated to be completed August 2023.
- Pupin Hall, Levels 100, 200 and 1300 (538 West 120th Street): Renovation of approximately 6,000 gsf of academic space to expand the laboratory spaces on the 100 and 200 levels (Pasupathy Lab) and the office space on the 1300 level for research purposes. This project has been completed.
- McBain Residence Hall (562 West 113th Street): Façade renovations and repairs in compliance with Local Law 11 regulations. This project has been completed.
- Broadway Residence Hall (2900 Broadway): Upgrade and modernization of elevators in compliance with New York City Building Code requirements. This project has been completed.

- East Campus Residence Hall (70 Morningside Drive): Building infrastructure upgrades and modernization, including replacement of insulation and exhaust systems. This project has been completed.
- Wallach Residence Hall (1116 Amsterdam Avenue): Building upgrades, including replacement of fire alarm system, sprinkler system expansion, and associated asbestos abatement. This project is currently in progress and is anticipated to be completed in August 2024.
- Arthur W. Diamond Law Library in Jerome Greene Hall (435 W 116th Street): Life safety system upgrades, including replacement of fire alarm system and sprinkler installation. This project is currently in progress and is anticipated to be completed in Fall 2024.
- Broadway Residence Hall (2900 Broadway): Improvements to the approximately 117,000-gsf building in compliance with the Americans with Disabilities Act ("ADA") and latest New York City Department of Buildings codes, including reconfiguration of existing space, electrical improvements, new chair rails, ceiling grid and tile, carpet, floors, and LED lighting. This project is currently in progress and is anticipated to be completed in August 2023.
- 611 West 112th Street: Design and gut renovation of an approximately 36,560gsf, 6-story, residential building that the University acquired in 2021 to accommodate student housing. This project is currently in the design and early construction phase anticipated to be completed by August 2023.
- Casa Italiana Building (1161 Amsterdam Avenue): Roof replacement and façade renovations and repairs. This project is currently in progress and is anticipated to be completed Spring 2024.
- Alfred Lerner Hall (2920 Broadway): Renovation and repairs to the roof and glassblock bullnose. This project has been completed.

Irving Medical Center Campus. The Proposed Project would include the following renovation projects in buildings or facilities on the Medical Center Campus, located within the area bounded by 164th and 169th from Broadway to Riverside Drive and 169th and 173rd Street from Haven Avenue to Riverside Drive, and at 390 Fort Washington Avenue, to be used for academic, residential, research, and administrative purposes:

• Haven Avenue Towers 1, 2, and 3 (60-100 Haven Avenue): Renovation of three, approximately 30-story buildings providing approximately 400 graduate and medical student apartments and 11 offices, including life safety upgrades, building improvements, required abatement work. This project has been completed.

- Hammer Health Sciences Building, 2nd, 7th, and 8th Floors (701 West 168th Street): Renovation of approximately 12,808 gsf of offices, classrooms, and IT support spaces on the 2nd, 7th, and 8th floors of the Hammer Health Sciences Building to accommodate new wet research laboratories, offices, and support spaces for the Vagelos College of Physicians and Surgeons and the Department of Ophthalmology. This project is currently under construction and is anticipated to be completed by September 2023.
- William Black Medical Research Building, 5th Floor (650 West 168th Street): Renovation of approximately 7,684 gsf of existing laboratory spaces, offices, corridors, and restrooms on the 5th floor of the William Black Medical Research Building into a new laboratory facility to meet the modern research needs of the Department of Biochemistry and Molecular Biophysics department. This project has been completed.
- Vagelos College of Physicians and Surgeons Building, 5th and 7th Floors (630 West 168th Street): Renovation of approximately 6,644 gsf of existing amphitheater, office, corridor, and restroom spaces on the 5th and 7th floors of the Vagelos College of Physicians and Surgeons Building to convert into a new wet laboratory research facility, including offices and support spaces. This project has been completed.
- The Neurological Institute of New York Building, Basement Level (710 West 168th Street): Renovation of approximately 18,000 gsf of existing space in the building's basement to expand the imaging facilities in the Neurological Institute of New York building. This project is currently in progress and is anticipated to be completed by January 2024.
- Allan Rosenfield Building, 1st Floor (722 West 168th Street): Renovation of approximately 11,000 gsf of existing space on the 1st floor of the building to construct a centralized biobanking facility. This project is currently in progress and is anticipated to be completed by August 2024.
- Vagelos College of Physicians and Surgeons Building, 7th Floor (630 West 168th Street): Renovation of approximately 3,174 gsf of existing office space in the Department of Pharmacology for conversion into laboratories for wet research. This project has been completed.

Institutional Real Estate. Additionally, the Proposed Project would involve upgrades to various existing Institutional Real Estate ("IRE") apartment properties for University-related housing on the Upper West Side of Manhattan, located in the areas bounded by West 108th to West 110th Street from Manhattan Avenue to Riverside Drive, West 110th to West 122nd Streets from Morningside Drive to Riverside Drive, West 122nd to West 125th Streets from Amsterdam Avenue to Riverside Drive, and at the following additional addresses: 200 West End Avenue, 258 Riverside Drive, 2700 Broadway, 455 Central Park West, and at 3260 Henry Hudson Parkway, in the Bronx, New York.

Refinancing. The Proposed Project would also involve the refinancing of taxable commercial paper issued by Columbia University, the proceeds of which were used to redeem the University's Series 2011A Bonds issued by DASNY (\$125.0 million).

As described above and in the attached documents, the Proposed Project components at the Studebaker Building, Nash Building, Columbia's Medical Center Campus and Morningside Heights Campus, as well as at the various IRE locations, would entail the "maintenance or repair involving no substantial changes in an existing structure or facility"; the "replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building, energy, or fire codes"; "conducting concurrent environmental, engineering, economic, feasibility and other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action, provided those activities of educational institutions, including expansion of existing facilities by less than 10,000 square feet of gross floor area and school closings"; "refinancing of existing debt", and/or the "purchase or sale of furnishings, equipment or supplies, including surplus government property", which are Type II actions as specifically designated by 6 *N.Y.C.R.R.* § 617.5(c)(2), 6 *N.Y.C.R.R.* § 617.5(c)(10), 6 *N.Y.C.R.R.* § 617.5(c)(27), 6 *N.Y.C.R.R.* § 617.5(c)(29) and 6 *N.Y.C.R.R.* § 617.5(c)(31), respectively.

Type II "actions have been determined not to have significant impact on the environment or are otherwise precluded from environmental review under Environmental Conservation Law, article 8."⁴ Therefore, no further *SEQR* determination or procedure is required for any component of the Proposed Project identified as Type II.

SHPA. Several of the projects listed above are located in buildings within Columbia University's Manhattanville, Morningside Heights and Irving Medical Center campuses that are either listed or eligible for listing in the State and National Registers of Historic Places ("S/NR"), such as the Studebaker Building (S/NR eligible), Nash Building (S/NR eligible), McBain Residence Hall (within S/NR-listed Morningside Heights Historic District), Pupin Hall (S/NR listed), Wallach Residence Hall (Columbia University Historic District), The Casa Italiana Building (S/NR listed and New York City Landmark), and the building at 611 West 112th Street (within S/NR-eligible Broadway-Riverside Historic District). The proposed work would at these locations would involve renovation, repairs and upgrades as needed to meet Columbia University's academic, residential, research, and administrative needs. In compliance with Article III, Section 3.0 of the MOU, OPRHP would be notified of the Proposed Project being funded with bond proceeds. It is the opinion of DASNY that the Proposed Project would have no adverse impact on historical or cultural resources in or eligible for inclusion in the S/NR.

The New Building component of the Proposed Project, currently under construction at 600 West 125th Street across from the Manhattanville campus, does not contain any historic buildings listed or potentially eligible for listing in the S/NR. However, as noted above, the project site is located adjacent to the Tiemann East Historic District, which is S/NR eligible. As such, the OPRHP was

⁴ 6 *N.Y.C.R.R.* § 617.5(a).

consulted to assess the potential impacts to historic resources due to the Proposed Project. A review of submitted materials was completed by the OPRHP (Project No. 22PR03355), and in its letter dated June 1, 2022 (attached), OPRHP rendered an opinion that "...the proposed work will have No Adverse Impact on historic resources" with the condition that a Construction Protection Plan ("CPP") be implemented for the properties at 31 and 45 Tiemann Place, which are contributing buildings within the S/NR-eligible historic district. No further review in accordance with the SHPA is required.

Based on the above, it is the opinion of DASNY that the Proposed Project would have no adverse impact on historic or cultural resources in or eligible for inclusion in the S/NR.

SGPIPA. DASNY's Smart Growth Advisory Committee reviewed the *SGISAF* that was prepared in accordance with the *SGPIPA* and found that, to the extent practicable, the Proposed Project would be consistent with and would be generally supportive of the smart growth criteria established by the legislation. The compatibility of the Proposed Project with the criteria of the *SSGPIPA*, Article 6 of the *ECL*, is detailed in the *SGISAF* (see attached). In general, the Proposed Project would be in compliance with the relevant State and local public policy initiatives that guide development within the project area.

LWRP and CZMP. DASNY assessed the Proposed Project for consistency with the policies set forth in the State's *CZMP* and New York City's *LWRP*. After review and analysis of these city and state policies, it was determined that there would be no significant adverse impacts in the coastal zone as a result of the Proposed Project. In addition, the building's location away from the waterfront prevents it from having an effect on natural resources or shoreline erosion. Accordingly, DASNY finds that the Proposed Project would comply to the maximum extent practicable with New York State's *CZMP* and New York City's *LWRP*, and it would be conducted in a manner consistent with such programs. The Proposed Project would not substantially hinder the achievement of any of the coastal policies set forth in Section 600.5 of 6 *N.Y.C.R.R.* Part 617 and would advance one or more such policies. Accordingly, DASNY certifies that the Proposed Project would be consistent with applicable policies set forth in 19 *N.Y.C.R.R.* § 600.5.

Summary. DASNY has reviewed the Proposed Project using criteria provided in Part 617.7 of *SEQRA* and has determined that:

- there will be no substantial adverse change in existing air quality, ground or surface water quality or quantity, traffic or noise levels; no substantial increase in solid waste production; and no substantial increase in potential for erosion, flooding, leaching or drainage problems;
- there will be no removal or destruction of large quantities of vegetation or fauna; no substantial interference with the movement of any resident or migratory fish or wildlife species; no impacts on a significant habitat area; no substantial adverse impacts on a threatened or endangered species of animal or plant, or the habitat of such a species; or other significant adverse impacts to natural resources;

- (iii) there will be no impairment of the environmental characteristics of a Critical Environmental Area as designated pursuant to subdivision 617.14(g) of this Part;
- (iv) there will be no creation of a material conflict with a community's current plans or goals as officially approved or adopted;
- (v) there will be no impairment of the character or quality of important historical, archeological, architectural, or aesthetic resources or of existing community or neighborhood character;
- (vi) there will be no major change in the use of either the quantity or type of energy;
- (vii) there will be no creation of a hazard to human health;
- (viii) there will be no substantial change in the use, or intensity of use, of land including agricultural, open space or recreational resources, or in its capacity to support existing uses;
- (ix) there will be no encouraging or attracting of a large number of people to a place or places for more than a few days, compared to the number of people who would come to such place absent the action;
- (x) there will be no creation of a material demand for other actions that would result in one of the above consequences;
- (xi) there will be no changes in two or more elements of the environment, no one of which has a significant impact on the environment, but when considered together result in a substantial adverse impact on the environment;
- (xii) there will not be two or more related actions undertaken, funded or approved by an agency, none of which has or would have a significant impact on the environment, but when considered cumulatively would meet one or more of the criteria in this subdivision; and
- (xiii) there will be no other significant adverse environmental impacts.

Based on the above, and the additional information contained herein, DASNY, as lead agency, analyzed the relevant areas of environmental concern and determined that the Proposed Project would not have a significant adverse impact on the environment and a Draft Environmental Impact Statement will not be prepared.

For Further Information:

| Contact Person: | Robert S. Derico, R.A. Director Office of Environmental Affairs |
|-----------------|---|
| Address: | DASNY 515 Broadway Albany, New York 12207-2964 |
| Telephone: | (518) 257-3214 |
| Email: | rderico@dasny.org |

Full Environmental Assessment Form Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

| Name of Action or Project: | | |
|---|------------|-----------|
| Project Location (describe, and attach a general location map): | | |
| Brief Description of Proposed Action (include purpose or need): | | |
| Name of Applicant/Sponsor: | Telephone: | |
| | E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |
| Project Contact (if not same as sponsor; give name and title/role): | Telephone: | I |
| | E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |
| Property Owner (if not same as sponsor): | Telephone: | I |
| | E-Mail: | |
| Address: | | |
| City/PO: | State: | Zip Code: |

B. Government Approvals

| B. Government Approvals, Funding, or Sponsorship. | ("Funding" | 'includes grants, | loans, tax rel | lief, and any c | other forms | of financial |
|---|------------|-------------------|----------------|-----------------|-------------|--------------|
| assistance.) | | | | | | |

| Government | Entity | If Yes: Identify Agency and Approval(s) Required | | ation Date or projected) |
|--|-----------------------|--|----------|-----------------------------|
| a. City Counsel, Town Boa or Village Board of Trus | | | | |
| b. City, Town or Village Planning Board or Comm | □ Yes □ No nission | | | |
| c. City, Town or Village Zoning Board of | □ Yes □ No Appeals | | | |
| d. Other local agencies | \Box Yes \Box No | | | |
| e. County agencies | \Box Yes \Box No | | | |
| f. Regional agencies | \Box Yes \Box No | | | |
| g. State agencies | \Box Yes \Box No | | | |
| h. Federal agencies | \Box Yes \Box No | | | |
| i. Coastal Resources.<i>i</i>. Is the project site with | nin a Coastal Area, o | or the waterfront area of a Designated Inland Water | rway? | □ Yes □ No |
| <i>ii</i> . Is the project site loca <i>iii</i> . Is the project site with | • | with an approved Local Waterfront Revitalization Hazard Area? | Program? | □ Yes □ No □ Yes □ No |

C. Planning and Zoning

| C.1. Planning and zoning actions. | |
|--|------------|
| Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? If Yes, complete sections C, F and G. If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 | □ Yes □ No |
| C.2. Adopted land use plans. | |
| a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? | □ Yes □ No |
| If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? | □ Yes □ No |
| b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) If Yes, identify the plan(s): | □ Yes □ No |
| | |
| c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? If Yes, identify the plan(s): | □ Yes □ No |
| | |

| C.3. Zoning | |
|---|------------|
| a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? | □ Yes □ No |
| b. Is the use permitted or allowed by a special or conditional use permit? | □ Yes □ No |
| c. Is a zoning change requested as part of the proposed action?If Yes,<i>i</i>. What is the proposed new zoning for the site? | □ Yes □ No |
| C.4. Existing community services. | |
| a. In what school district is the project site located? | |
| b. What police or other public protection forces serve the project site? | |
| c. Which fire protection and emergency medical services serve the project site? | |
| d. What parks serve the project site? | |
| | |

٦

D. Project Details n 1. Pr А, d Potential De

L

| D.1. Proposed and Potential Development | |
|---|---|
| a. What is the general nature of the proposed action (e.g., residential, industrial, components)? | al, commercial, recreational; if mixed, include all |
| b. a. Total acreage of the site of the proposed action? | acres |
| | acres |
| c. Total acreage (project site and any contiguous properties) owned | |
| or controlled by the applicant or project sponsor? | acres |
| c. Is the proposed action an expansion of an existing project or use? | \Box Yes \Box No |
| <i>i</i> . If Yes, what is the approximate percentage of the proposed expansion and | |
| | |
| d. Is the proposed action a subdivision, or does it include a subdivision? | \Box Yes \Box No |
| If Yes, | |
| <i>i</i> . Purpose or type of subdivision? (e.g., residential, industrial, commercial; | if mixed, specify types) |
| <i>ii.</i> Is a cluster/conservation layout proposed? | □ Yes □ No |
| <i>iii</i> . Number of lots proposed? | |
| <i>iv</i> . Minimum and maximum proposed lot sizes? Minimum M | laximum |
| e. Will the proposed action be constructed in multiple phases? | \Box Yes \Box No |
| <i>i</i> . If No, anticipated period of construction: | months |
| <i>ii</i> . If Yes: | |
| • Total number of phases anticipated | |
| • Anticipated commencement date of phase 1 (including demolition) | |
| Anticipated completion date of final phase | monthyear |
| Generally describe connections or relationships among phases, inclu | |
| determine timing or duration of future phases: | |
| | |
| | |

| | et include new resid | | | | \Box Yes \Box No |
|---|---------------------------------------|---------------------------------------|---|---|---|
| If Yes, show num | bers of units propo | | | | |
| | One Family | <u>Two Family</u> | Three Family | Multiple Family (four or more) | |
| Initial Phase | | | | | |
| At completion | | | | | |
| of all phases | | | | | |
| g. Does the prope | osed action include | new non-residentia | al construction (inclu | iding expansions)? | \Box Yes \Box No |
| If Yes, | | | | | *project involves the |
| <i>i</i> . Total number | of structures | <u>_</u> | | | construction of a single building |
| <i>ii</i> . Dimensions (| in feet) of largest p | roposed structure: | height; | width; andlength | with commercial uses on the ground floor, which are detailed |
| | - | - | | square feet | here |
| | | | | l result in the impoundment of any | \Box Yes \Box No |
| liquids, such a If Yes, | s creation of a wate | er supply, reservoir. | , pond, lake, waste la | agoon or other storage? | |
| | impoundment. | | | | |
| <i>ii.</i> If a water imp | oundment, the prin | cipal source of the | water: | □ Ground water □ Surface water str | eams □ Other specify: |
| | | | | | |
| <i>iii</i> . If other than w | vater, identify the t | ype of impounded/ | contained liquids and | d their source. | |
| iv Approvimate | size of the propose | dimpoundment | Volume | million gallons; surface area: | 20126 |
| v. Dimensions of | f the proposed dam | or impounding str | ucture: | height; length | |
| | | | | ructure (e.g., earth fill, rock, wood, co | oncrete): |
| | | | | | , |
| | | | | | |
| D.2. Project Op | erations | | | | |
| | | | | uring construction, operations, or bot | h? \Box Yes \Box No |
| | | ation, grading or in | stallation of utilities | or foundations where all excavated | |
| materials will r | emain onsite) | | | | |
| If Yes: | | otion on due deine 9 | | | |
| <i>i</i> . What is the pt | torial (including ro | ation of dredging? | is proposed t | o be removed from the site? | |
| | | | | | |
| Over where the over whether the over whether the over the ove | at duration of time | ? | | | |
| • Over what duration of time? | | | | | |
| | | | · · · · · · · · · · · · · · · · · · · | | |
| · W/11 (1 1 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | | | |
| | be | | cavated materials? | | \Box Yes \Box No |
| ii yes, descii | 0e | | | · · · · · · · · · · · · · · · · · · · | |
| v. What is the to | tal area to be dreds | red or excavated? | | acres | |
| <i>vi.</i> What is the m | aximum area to be | worked at any one | time? | acres | |
| | | • | | feet | |
| | avation require blas | | 0 0 | | \Box Yes \Box No |
| ix. Summarize sit | e reclamation goals | s and plan: | | | |
| | | | | | |
| | | | | | |
| b XX7 = 1.1.4 | and a street | an manufacture for set | an of increases | | |
| | | | on of, increase or de ch or adjacent area? | crease in size of, or encroachment | \Box Yes \Box No |
| If Yes: | ng wenanu, wateru | ouy, shorenne, bed | an or aujacent area? | | |
| | vetland or waterbod | ly which would be | affected (by name, v | vater index number, wetland map nur | nber or geographic |
| | | | | | |
| | | | | | |
| | | | | | |

| <i>ii</i> . Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placem alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in sq | |
|---|--|
| | |
| <i>iii.</i> Will the proposed action cause or result in disturbance to bottom sediments? If Yes, describe: | Yes □ No |
| <i>iv.</i> Will the proposed action cause or result in the destruction or removal of aquatic vegetation? | \Box Yes \Box No |
| If Yes: | |
| acres of aquatic vegetation proposed to be removed: | |
| expected acreage of aquatic vegetation remaining after project completion: | |
| • purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): | |
| proposed method of plant removal: | |
| if chemical/herbicide treatment will be used, specify product(s): | |
| v. Describe any proposed reclamation/mitigation following disturbance: | |
| Will the proposed action use, or create a new demand for water? | □ Yes □ No |
| Yes: | 100 110 |
| <i>i</i> . Total anticipated water usage/demand per day: gallons/day | |
| ii. Will the proposed action obtain water from an existing public water supply? | \Box Yes \Box No |
| Yes: | |
| Name of district or service area: Does the existing public water supply have capacity to serve the proposal? | □ Yes □ No |
| Is the project site in the existing district? | \Box Tes \Box No \Box Yes \Box No |
| Is expansion of the district needed? | \Box Yes \Box No |
| Do existing lines serve the project site? | \Box Yes \Box No |
| <i>i.</i> Will line extension within an existing district be necessary to supply the project? | \Box Yes \Box No |
| Yes: | |
| Describe extensions or capacity expansions proposed to serve this project: | |
| Source(s) of supply for the district: | |
| <i>iv.</i> Is a new water supply district or service area proposed to be formed to serve the project site? | □ Yes □ No |
| c, Yes: | - 105 - 110 |
| Applicant/sponsor for new district: | |
| Date application submitted or anticipated: | |
| | |
| v. If a public water supply will not be used, describe plans to provide water supply for the project: | |
| vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: | gallons/minute. |
| . Will the proposed action generate liquid wastes? | \Box Yes \Box No |
| f Yes: | |
| <i>i</i> . Total anticipated liquid waste generation per day: gallons/day | |
| <i>ii.</i> Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe a approximate volumes or proportions of each): | |
| | |
| <i>i</i> . Will the proposed action use any existing public wastewater treatment facilities? | □ Yes □ No |
| If Yes: | - 105 - 110 |
| Name of wastewater treatment plant to be used: | |
| Name of district: | |
| • Does the existing wastewater treatment plant have capacity to serve the project? | \Box Yes \Box No |
| • Is the project site in the existing district? | $\Box \operatorname{Yes} \Box \operatorname{No}$ |
| • Is expansion of the district needed? | \Box Yes \Box No |

| • Do existing sewer lines serve the project site? | \Box Yes \Box No |
|---|----------------------|
| • Will a line extension within an existing district be necessary to serve the project? | \Box Yes \Box No |
| If Yes: | |
| Describe extensions or capacity expansions proposed to serve this project: | |
| | |
| <i>iv.</i> Will a new wastewater (sewage) treatment district be formed to serve the project site? | □ Yes □ No |
| If Yes: | |
| Applicant/sponsor for new district: | |
| Date application submitted or anticipated: | |
| What is the receiving water for the wastewater discharge? | |
| v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including speci | fying proposed |
| receiving water (name and classification if surface discharge or describe subsurface disposal plans): | |
| | |
| ui Deserite any plane or designs to contine, recursic or reuse liquid yests. | |
| <i>vi.</i> Describe any plans or designs to capture, recycle or reuse liquid waste: | · |
| | |
| | |
| e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point | \Box Yes \Box No |
| sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point | |
| source (i.e. sheet flow) during construction or post construction? | |
| If Yes: | |
| <i>i</i> . How much impervious surface will the project create in relation to total size of project parcel? | |
| Square feet or acres (impervious surface) | |
| Square feet or acres (parcel size) | |
| <i>ii</i> . Describe types of new point sources. | |
| <i>iii.</i> Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent pr | operties |
| groundwater, on-site surface water or off-site surface waters)? | opernes, |
| groundwater, on site surface water of on site surface waters). | |
| | |
| If to surface waters, identify receiving water bodies or wetlands: | |
| | |
| | |
| • Will stormwater runoff flow to adjacent properties? | \Box Yes \Box No |
| <i>iv.</i> Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? | \Box Yes \Box No |
| f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel | \Box Yes \Box No |
| combustion, waste incineration, or other processes or operations? | |
| If Yes, identify: | |
| <i>i</i> . Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) | |
| <i>ii.</i> Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) | |
| <i>ii. Suutonary sources aaring construction (c.g., power generation, structural neuring, baten plant, crushers)</i> | |
| iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) | |
| | |
| g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, | \Box Yes \Box No |
| or Federal Clean Air Act Title IV or Title V Permit? | |
| If Yes: | |
| <i>i</i> . Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet | \Box Yes \Box No |
| ambient air quality standards for all or some parts of the year) | |
| ii. In addition to emissions as calculated in the application, the project will generate: | |
| •Tons/year (short tons) of Carbon Dioxide (CO ₂) | |
| •Tons/year (short tons) of Nitrous Oxide (N ₂ O) | |
| •Tons/year (short tons) of Perfluorocarbons (PFCs) | |
| •Tons/year (short tons) of Sulfur Hexafluoride (SF ₆) | |
| Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs) | |
| Tons/year (short tons) of Hazardous Air Pollutants (HAPs) | |
| • I ons/year (short tons) of Hazardous Air Pollutants (HAPs) | |

| h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? If Yes: <i>i</i>. Estimate methane generation in tons/year (metric): | □ Yes □ No |
|---|------------|
| i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): | □ Yes □ No |
| j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? If Yes: <i>i</i>. When is the peak traffic expected (Check all that apply): □ Morning □ Evening □ Weekend □ Randomly between hours of to <i>ii</i>. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump truck) | □ Yes □ No |
| <i>iii.</i> Parking spaces: Existing Proposed Net increase/decrease <i>iv.</i> Does the proposed action include any shared use parking? <i>v.</i> If the proposed action includes any modification of existing roads, creation of new roads or change in existing <i>vi.</i> Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? <i>vii.</i> Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <i>viii.</i> Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? | Yes No |
| k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? If Yes: <i>i</i>. Estimate annual electricity demand during operation of the proposed action: <i>ii</i>. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/ other): <i>iii</i>. Will the proposed action require a new, or an upgrade, to an existing substation? | |
| 1. Hours of operation. Answer all items which apply. ii. During Operations: iii. During Operations: iii. During Operations: iiii. During Operations: iiiii. | |

| m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? | \Box Yes \Box No |
|--|---------------------------------------|
| If yes: | |
| <i>i</i> . Provide details including sources, time of day and duration: | |
| | |
| <i>ii.</i> Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? Describe: | \Box Yes \Box No |
| | |
| n. Will the proposed action have outdoor lighting? | \Box Yes \Box No |
| If yes: <i>i</i> . Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: | |
| | |
| <i>ii.</i> Will proposed action remove existing natural barriers that could act as a light barrier or screen? | □ Yes □ No |
| Describe: | |
| | □ Yes □ No |
| o. Does the proposed action have the potential to produce odors for more than one hour per day? If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest | |
| occupied structures: | |
| | |
| p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) | □ Yes □ No |
| or chemical products 185 gallons in above ground storage or any amount in underground storage? | 105 110 |
| If Yes: <i>i</i> . Product(s) to be stored | |
| <i>ii.</i> Volume(s) per unit time (e.g., month, year) | |
| <i>iii.</i> Generally, describe the proposed storage facilities: | |
| q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, | □ Yes □ No |
| insecticides) during construction or operation? | |
| If Yes: <i>i</i> . Describe proposed treatment(s): | |
| | |
| | |
| | |
| <i>ii.</i> Will the proposed action use Integrated Pest Management Practices? r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal | $\Box Yes \Box No$ $\Box Yes \Box No$ |
| of solid waste (excluding hazardous materials)? | |
| If Yes: <i>i</i> . Describe any solid waste(s) to be generated during construction or operation of the facility: | |
| Construction: tons per (unit of time) | |
| • Operation : tons per (unit of time) <i>ii.</i> Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waster | |
| Construction: | |
| | |
| • Operation: | |
| <i>iii.</i> Proposed disposal methods/facilities for solid waste generated on-site: | |
| • Construction: | |
| Operation: | |
| | |

| s. Does the proposed action include construction or modification of a solid waste management facility? |
|--|
| <i>i</i>. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): |
| <i>ii.</i> Anticipated rate of disposal/processing: |
| • Tons/month, if transfer or other non-combustion/thermal treatment, or |
| • Tons/hour, if combustion or thermal treatment |
| <i>iii.</i> If landfill, anticipated site life: years |
| t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous \Box Yes \Box No waste? |
| If Yes: |
| <i>i</i> . Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: |
| |
| <i>ii.</i> Generally describe processes or activities involving hazardous wastes or constituents: |
| <i>iii</i> . Specify amount to be handled or generated tons/month |
| <i>iv.</i> Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: |
| ···· = ······························· |
| |
| v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? \Box Yes \Box No |
| If Yes: provide name and location of facility: |
| |
| If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: |
| · · · · · · · · · · · · · · · · · · · |
| |
| E. Site and Setting of Proposed Action |
| |

| E.1. Land uses on and surrounding the project site | | | | |
|--|--|-------------------------------------|-----------------------|--|
| | project site. lential (suburban) □ Rura (specify): | | | |
| b. Land uses and covertypes on the project site. | | | | |
| Land use or Covertype | Current Acreage | Acreage After Project Completion | Change (Acres +/-) | |
| • Roads, buildings, and other paved or impervious surfaces | | | | |
| Forested | | | | |
| • Meadows, grasslands or brushlands (non- agricultural, including abandoned agricultural) | | | | |
| • Agricultural (includes active orchards, field, greenhouse etc.) | | | | |
| • Surface water features (lakes, ponds, streams, rivers, etc.) | | | | |
| • Wetlands (freshwater or tidal) | | | | |
| • Non-vegetated (bare rock, earth or fill) | | | | |
| Other Describe: | | | | |

| c. Is the project site presently used by members of the community for public recreation? <i>i.</i> If Yes: explain: | \Box Yes \Box No |
|--|----------------------|
| d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? If Yes, <i>i</i>. Identify Facilities: | □ Yes □ No |
| | |
| e. Does the project site contain an existing dam? If Yes: | □ Yes □ No |
| <i>i</i> . Dimensions of the dam and impoundment: | |
| Dam height: feet | |
| • Dam length: feet | |
| • Surface area: acres | |
| Volume impounded: gallons OR acre-feet | |
| <i>ii.</i> Dam's existing hazard classification: <i>iii.</i> Provide date and summarize results of last inspection: | |
| | |
| | |
| f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facili If Yes: | □ Yes □ No ity? |
| <i>i</i> . Has the facility been formally closed? | □ Yes □ No |
| If yes, cite sources/documentation: | |
| <i>ii.</i> Describe the location of the project site relative to the boundaries of the solid waste management facility: | |
| | |
| <i>iii.</i> Describe any development constraints due to the prior solid waste activities: | |
| g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? | □ Yes □ No |
| If Yes: <i>i</i> . Describe waste(s) handled and waste management activities, including approximate time when activities occurre | d: |
| | |
| h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? If Yes: | □ Yes □ No |
| <i>i</i> . Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: | □ Yes □ No |
| □ Yes – Spills Incidents database Provide DEC ID number(s): | |
| □ Yes – Environmental Site Remediation database □ Neither database Provide DEC ID number(s): | |
| <i>ii</i> . If site has been subject of RCRA corrective activities, describe control measures: | |
| <i>iii.</i> Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? If yes, provide DEC ID number(s): | □ Yes □ No |
| <i>iv.</i> If yes to (i), (ii) or (iii) above, describe current status of site(s): | |
| | |
| | |

546031: Construction work for Phase 2 of the remedial project started in 2011, and was completed in 2016. Dredging was completed in fall 2015; habitat reconstruction was completed in 2016. Facility decommissioning was performed in 2016.

9302776: Spills Incident Database. Under construction.

| <i>v</i> . Is the project site subject to an institutional control limiting property uses? | □ Y | es □ No |
|---|----------------------|----------|
| If yes, DEC site ID number: | | |
| Describe the type of institutional control (e.g., deed restriction or easement): | | |
| Describe any use limitations: | | |
| Will the project affect the institutional or engineering controls in place? | | es □ No |
| Explain: | | 05 - 110 |
| | | |
| | | |
| E.2. Natural Resources On or Near Project Site | | |
| a. What is the average depth to bedrock on the project site?f | eet | |
| b. Are there bedrock outcroppings on the project site? | □ Y | es 🗆 No |
| If Yes, what proportion of the site is comprised of bedrock outcroppings? | % | |
| c. Predominant soil type(s) present on project site: | % | |
| c. Predominant soil type(s) present on project site: | % | |
| | % | |
| d. What is the average depth to the water table on the project site? Average: feet | | |
| e. Drainage status of project site soils: □ Well Drained:% of site | | |
| □ Moderately Well Drained:% of site | | |
| Desider Desired 0/ of site | | |
| In Poorly Drained % of site f. Approximate proportion of proposed action site with slopes: Image: 0-10%: Image: I | % of site | |
| □ 10-15%: | % of site | |
| \Box 15% or greater: | % of site | |
| g. Are there any unique geologic features on the project site? | | es □ No |
| If Yes, describe: | | |
| | | |
| h. Surface water features. | | |
| i. Does any portion of the project site contain wetlands or other waterbodies (including stream | ns, rivers, $\Box Y$ | es □ No |
| ponds or lakes)? | | |
| <i>ii.</i> Do any wetlands or other waterbodies adjoin the project site? | $\Box Y$ | es □ No |
| If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i. | | > _ |
| <i>iii.</i> Are any of the wetlands or waterbodies within or adjoining the project site regulated by an atom or local accord | y federal, $\Box Y$ | es □ No |
| state or local agency? <i>iv.</i> For each identified regulated wetland and waterbody on the project site, provide the follow | ing information. | |
| Streams: Name Cla | | |
| • Lakes or Ponds: Name Cla | | |
| Wetlands: Name Ap | proximate Size | |
| • Wetland No. (if regulated by DEC) | | |
| <i>v</i> . Are any of the above water bodies listed in the most recent compilation of NYS water qualwaterbodies? | ty-impaired \Box Y | es □ No |
| If yes, name of impaired water body/bodies and basis for listing as impaired: | | |
| | | |
| i. Is the project site in a designated Floodway? | □ Y | es □ No |
| j. Is the project site in the 100-year Floodplain? | □ Y | es 🗆 No |
| k. Is the project site in the 500-year Floodplain? | □ Y | es □ No |
| 1. Is the project site located over, or immediately adjoining, a primary, principal or sole source | aquifer? | es □ No |
| If Yes: | | |
| <i>i</i> . Name of aquifer: | | |
| | | |

| m. Identify the predominant wildlife species that occupy or use the project site: | |
|--|----------------------|
| In Identify the predominant when especies that occupy of use the project site. | |
| | |
| | |
| n. Does the project site contain a designated significant natural community? | \Box Yes \Box No |
| If Yes: | |
| <i>i</i> . Describe the habitat/community (composition, function, and basis for designation): | |
| : Course(a) of description on evolution. | |
| <i>ii</i> . Source(s) of description or evaluation: | |
| • | |
| Currently: acres Following completion of project as proposed: acres | |
| Gain or loss (indicate + or -): | |
| | |
| o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as | |
| endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened | species? |
| If Yes: | |
| <i>i</i> . Species and listing (endangered or threatened): | |
| , Northern Long-Eared Bat, and Monarch Butterfly. | |
| However, IPaC did not identify any critical habitat for these species. | |
| | |
| p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of | \Box Yes \Box No |
| special concern? | |
| If Yes: | |
| i. Species and listing: | |
| | |
| | |
| q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? | \Box Yes \Box No |
| If yes, give a brief description of how the proposed action may affect that use: | |
| | |
| | |
| E.3. Designated Public Resources On or Near Project Site | |
| a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to | \Box Yes \Box No |
| Agriculture and Markets Law, Article 25-AA, Section 303 and 304? | |
| If Yes, provide county plus district name/number: | |
| b. Are agricultural lands consisting of highly productive soils present? | \Box Yes \Box No |
| <i>i.</i> If Yes: acreage(s) on project site? | |
| <i>ii.</i> Source(s) of soil rating(s): | |
| | |
| c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? | \Box Yes \Box No |
| Indural Landmark? | |
| <i>i</i> . Nature of the natural landmark: | |
| <i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: | |
| | |
| | |
| | |
| d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? | \Box Yes \Box No |
| If Yes: | |
| <i>i.</i> CEA name: | |
| <i>ii.</i> Basis for designation: | |
| iii. Designating agency and date: | |

| e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commission Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places. If Yes: , , <i>Rigcug'lgg'p qg'dgny 0</i> <i>i</i>. Nature of historic/archaeological resource: Archaeological Site Historic Building or District <i>ii</i>. Name: <i>iii</i>. Brief description of attributes on which listing is based: | oner of the NYS |
|--|-----------------|
| f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? | □ Yes □ No |
| g. Have additional archaeological or historic site(s) or resources been identified on the project site? If Yes: <i>i</i>. Describe possible resource(s): <i>ii</i>. Basis for identification: | □ Yes □ No |
| h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? If Yes: i. Identify resource: ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or | □ Yes □ No |
| etc.): | |
| i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? If Yes: i. Identify the name of the river and its designation: | □ Yes □ No |
| <i>ii.</i> Is the activity consistent with development restrictions contained in 6NYCRR Part 666? | □ Yes □ No |

**From Section E.3.e.ii above: Eligible properties: two apartment buildings, former Sheffield Farms Dairy, Whitestone Apartments, Riverside Park and Drive, IRT Broadway Line Viaduct, Old Broadway Synagogue, Sheffield Farms Stable (OPRHP #22PR03355)

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name _____ Date_____

Signature <u>Allison Ruddock</u> Title_____



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



Samin, USGS, Internap, INCREMENTP, NR Can, Esn Japan, METI, Esn China (Hong Kong), Esn En Korea, Esn (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

EMENTE NRCan, Esti Japan, METI, Esti China (Hong Kong), Esti Perende Street Map contributors and the GIS User Community

| B.i.i [Coastal or Waterfront Area] | Yes |
|---|--|
| B.i.ii [Local Waterfront Revitalization Area] | Yes |
| C.2.b. [Special Planning District] | Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook. |
| C.2.b. [Special Planning District - Name] | NYS Heritage Areas:The Heights |
| E.1.h [DEC Spills or Remediation Site - Potential Contamination History] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h.i [DEC Spills or Remediation Site - Listed] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database] | Digital mapping data are not available or are incomplete. Refer to EAF Workbook. |
| E.1.h.iii [Within 2,000' of DEC Remediation Site] | Yes |
| E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID] | V00547, 231075, 546031 |
| E.2.g [Unique Geologic Features] | No |
| E.2.h.i [Surface Water Features] | No |
| E.2.h.ii [Surface Water Features] | No |
| E.2.h.iii [Surface Water Features] | No |
| E.2.h.v [Impaired Water Bodies] | No |
| E.2.i. [Floodway] | No |
| E.2.j. [100 Year Floodplain] | No |
| E.2.k. [500 Year Floodplain] | No |
| E.2.I. [Aquifers] | No |
| E.2.n. [Natural Communities] | No |

| E.2.o. [Endangered or Threatened Species] | Yes |
|--|--|
| E.2.o. [Endangered or Threatened Species - Name] | Peregrine Falcon, Atlantic Sturgeon, Shortnose Sturgeon |
| E.2.p. [Rare Plants or Animals] | No |
| E.3.a. [Agricultural District] | No |
| E.3.c. [National Natural Landmark] | No |
| E.3.d [Critical Environmental Area] | No |
| E.3.e. [National or State Register of Historic Places or State Eligible Sites] | Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook. |
| E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name] | Eligible property:two apartment buildings, Eligible property:former Sheffield Farms Dairy, Eligible property:Whitestone Apartments, Riverside Park and Drive, IRT Broadway Line Viaduct, Old Broadway Synagogue, Sheffield Farms Stable |
| E.3.f. [Archeological Sites] | No |
| E.3.i. [Designated River Corridor] | No |

Full Environmental Assessment FormPart 2 - Identification of Potential Project Impacts

Project : Date :

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "Yes" to a numbered question, please complete all the questions that follow in that section.
- If you answer "No" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

1. Impact on Land

| 1. | Impact on Land | | | |
|----|---|----------|-------|----------|
| | Proposed action may involve construction on, or physical alteration of, | 🗆 NO | | YES |
| | the land surface of the proposed site. (See Part 1. D.1) | | | |
| | If "Yes", answer questions a - j. If "No", move on to Section 2. | | | |
| | | Delevent | No or | Madanata |

| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|---|-----------------------------------|--|---|
| a. The proposed action may involve construction on land where depth to water table is less than 3 feet. | E2d | | |
| b. The proposed action may involve construction on slopes of 15% or greater. | E2f | | |
| c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface. | E2a | | |
| d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material. | D2a | | |
| e. The proposed action may involve construction that continues for more than one year or in multiple phases. | D1e | | |
| f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides). | D2e, D2q | | |
| g. The proposed action is, or may be, located within a Coastal Erosion hazard area. | Bli | | |
| h. Other impacts: | | | |

| The proposed action may result in the modification or destruction of, or inhib access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) <i>If "Yes", answer questions a - c. If "No", move on to Section 3.</i> | □ NO | | YES |
|--|-----------------------------------|--|---|
| ij ies , unswer questions a c. ij ivo , move on to section 5. | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. Identify the specific land form(s) attached: | E2g | | |
| b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: | E3c | | |
| c. Other impacts: | | | |
| 3. Impacts on Surface Water The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) If "Yes", answer questions a - l. If "No", move on to Section 4. | □ NC | | YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may create a new water body. | D2b, D1h | | |
| b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water. | D2b | | |
| c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body. | D2a | | |
| d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body. | E2h | | |
| e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments. | D2a, D2h | | |
| f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water. | D2c | | |
| g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s). | D2d | | |
| h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies. | D2e | | |
| i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action. | E2h | | |
| j. The proposed action may involve the application of pesticides or herbicides in or around any water body. | D2q, E2h | | |
| k. The proposed action may require the construction of new, or expansion of existing, | D1a, D2d | | |

| 1. Other impacts: | | | |
|---|-----------------------------------|--|---|
| 4. Impact on groundwater The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifa (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) If "Yes", answer questions a - h. If "No", move on to Section 5. | □ NC er. |) 🗆 | YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells. | D2c | | |
| b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: | D2c | | |
| c. The proposed action may allow or result in residential uses in areas without water and sewer services. | D1a, D2c | | |
| d. The proposed action may include or require wastewater discharged to groundwater. | D2d, E21 | | |
| e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated. | D2c, E1f, E1g, E1h | | |
| f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer. | D2p, E2l | | |
| g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources. | E2h, D2q, E2l, D2c | | |
| h. Other impacts: | | | |

| 5. Impact on Flooding The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) If "Yes", answer questions a - g. If "No", move on to Section 6. | □ NO | | YES |
|---|-----------------------------------|--|---|
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may result in development in a designated floodway. | E2i | | |
| b. The proposed action may result in development within a 100 year floodplain. | E2j | | |
| c. The proposed action may result in development within a 500 year floodplain. | E2k | | |
| d. The proposed action may result in, or require, modification of existing drainage patterns. | D2b, D2e | | |
| e. The proposed action may change flood water flows that contribute to flooding. | D2b, E2i, E2j, E2k | | |
| f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade? | E1e | | |

| g. Other impacts: | | | |
|--|---|--|---|
| 6. Impacts on Air The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) If "Yes", answer questions a - f. If "No", move on to Section 7. | □ NO | | YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: More than 1000 tons/year of carbon dioxide (CO₂) More than 3.5 tons/year of nitrous oxide (N₂O) More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) More than .045 tons/year of sulfur hexafluoride (SF₆) More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane | D2g D2g D2g D2g D2g D2g D2h | | |
| b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants. | D2g | | |
| c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour. | D2f, D2g | | |
| d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above. | D2g | | |
| e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour. | D2s | | |
| f. Other impacts: | | | |

| 7. Impact on Plants and Animals The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. mq.) If "Yes", answer questions a - j. If "No", move on to Section 8. | | □ NO | □ YES |
|--|-----------------------------------|--|---|
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2o | | |
| b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government. | E2o | | |
| c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site. | E2p | | |
| d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government. | E2p | | |

| e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect. | E3c | |
|---|-----|--|
| f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: | E2n | |
| g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site. | E2m | |
| h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: | E1b | |
| i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides. | D2q | |
| j. Other impacts: | | |

| 8. Impact on Agricultural Resources The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) <i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i> | | □ NO | □ YES |
|--|-----------------------------------|--|---|
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System. | E2c, E3b | | |
| b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc). | E1a, Elb | | |
| c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land. | E3b | | |
| d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District. | E1b, E3a | | |
| e. The proposed action may disrupt or prevent installation of an agricultural land management system. | El a, E1b | | |
| f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland. | C2c, C3, D2c, D2d | | |
| g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan. | C2c | | |
| h. Other impacts: | | | |

| If "Yes", answer questions a - g. If "No", go to Section 10. | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
|--|-----------------------------------|--|---|
| a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. | E3h | | |
| b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views. | E3h, C2b | | |
| c. The proposed action may be visible from publicly accessible vantage points:i. Seasonally (e.g., screened by summer foliage, but visible during other seasons)ii. Year round | E3h | | |
| d. The situation or activity in which viewers are engaged while viewing the proposed action is:i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities | E3h E2q, E1c | | |
| e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource. | E3h | | |
| f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile ½ -3 mile 3-5 mile 5+ mile | D1a, E1a, D1f, D1g | | |
| g. Other impacts: | | | |

| | Part I Question(s) | small impact | to large impact may |
|---|-----------------------|-----------------|------------------------|
| | | may occur | occur |
| a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner | E3e | | |
| of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places. | | | |
| b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory. | E3f | | |
| c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: | E3g | | |

| d. Other impacts: | | | |
|---|---|--|---|
| If any of the above (a-d) are answered "Moderate to large impact may e. occur", continue with the following questions to help support conclusions in Part 3: | | | |
| i. The proposed action may result in the destruction or alteration of all or part of the site or property. | E3e, E3g, E3f | | |
| ii. The proposed action may result in the alteration of the property's setting or integrity. | E3e, E3f, E3g, E1a, E1b | | |
| iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting. | E3e, E3f, E3g, E3h, C2, C3 | | |
| 11. Impact on Open Space and Recreation The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) If "Yes", answer questions a - e. If "No", go to Section 12. | | 0 🗆 | YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat. | D2e, E1b E2h, E2m, E2o, E2n, E2p | | |
| b. The proposed action may result in the loss of a current or future recreational resource. | C2a, E1c, C2c, E2q | | |
| c. The proposed action may eliminate open space or recreational resource in an area with few such resources. | C2a, C2c E1c, E2q | | |
| d. The proposed action may result in loss of an area now used informally by the community as an open space resource. | C2c, E1c | | |
| e. Other impacts: | | | |
| 12. Impact on Critical Environmental Areas The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) If "Yes", answer questions a - c. If "No", go to Section 13. | | 0 🗆 | YES |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| | 1 | | |
| a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA. | E3d | | |
| a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA. | E3d E3d | | |
| 13. Impact on Transportation The proposed action may result in a change to existing transportation systems | . 🗆 N(| | YES |
|--|-----------------------------------|--|---|
| (See Part 1. D.2.j) | | | 115 |
| If "Yes", answer questions a - f. If "No", go to Section 14. | Relevant Part I Question(s) | No, or small impact | Moderate to large impact may |
| a. Projected traffic increase may exceed capacity of existing road network. | D2j | may occur | occur |
| b. The proposed action may result in the construction of paved parking area for 500 or more vehicles. | D2j | | |
| c. The proposed action will degrade existing transit access. | D2j | | |
| d. The proposed action will degrade existing pedestrian or bicycle accommodations. | D2j | | |
| e. The proposed action may alter the present pattern of movement of people or goods. | D2j | | |
| f. Other impacts: | | | |
| | | | |
| 14. Impact on Energy The proposed action may cause an increase in the use of any form of energy. (See Part 1. D.2.k) | | | YES |
| If "Yes", answer questions a - e. If "No", go to Section 15. | Relevant | No, or | Moderate |
| | Part I Question(s) | small impact may occur | to large impact may occur |
| a. The proposed action will require a new, or an upgrade to an existing, substation. | D2k | | |
| b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. | D1f, D1q, D2k | | |
| c. The proposed action may utilize more than 2,500 MWhrs per year of electricity. | D2k | | |
| d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed. | D1g | | |
| e. Other Impacts: | | | |
| 15. Impact on Noise, Odor, and Light The proposed action may result in an increase in noise, odors, or outdoor ligh | ting. 🗆 NC | | YES |
| (See Part 1. D.2.m., n., and o.) If "Yes", answer questions a - f. If "No", go to Section 16. | | | |
| (See Part 1. D.2.m., n., and o.) If "Yes", answer questions a - f. If "No", go to Section 16. | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| | Part I | small impact | to large impact may |
| If "Yes", answer questions a - f. If "No", go to Section 16. a. The proposed action may produce sound above noise levels established by local | Part I Question(s) | small impact may occur | to large impact may occur |

| d. The proposed action may result in light shining onto adjoining properties. | D2n | |
|---|----------|--|
| e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions. | D2n, E1a | |
| f. Other impacts: | | |

| 16. Impact on Human Health The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. ar <i>If "Yes", answer questions a - m. If "No", go to Section 17.</i> | □ No nd h.) | 0 🛛 | YES |
|--|-----------------------------------|---------------------------------------|---|
| | Relevant Part I Question(s) | No,or small impact may cccur | Moderate to large impact may occur |
| a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community. | E1d | | |
| b. The site of the proposed action is currently undergoing remediation. | E1g, E1h | | |
| c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action. | E1g, E1h | | |
| d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction). | E1g, E1h | | |
| e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health. | E1g, E1h | | |
| f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health. | D2t | | |
| g. The proposed action involves construction or modification of a solid waste management facility. | D2q, E1f | | |
| h. The proposed action may result in the unearthing of solid or hazardous waste. | D2q, E1f | | |
| i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste. | D2r, D2s | | |
| j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste. | E1f, E1g E1h | | |
| k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures. | E1f, E1g | | |
| 1. The proposed action may result in the release of contaminated leachate from the project site. | D2s, E1f, D2r | | |
| m. Other impacts: | | | |

| 17. Consistency with Community Plans | | | 7 50 |
|---|-----------------------------------|--|---|
| The proposed action is not consistent with adopted land use plans. (See Part 1. C.1, C.2. and C.3.) | □ NO | ΠY | ES |
| If "Yes", answer questions a - h. If "No", go to Section 18. | | | 1 |
| | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s). | C2, C3, D1a E1a, E1b | | |
| b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%. | C2 | | |
| c. The proposed action is inconsistent with local land use plans or zoning regulations. | C2, C2, C3 | | |
| d. The proposed action is inconsistent with any County plans, or other regional land use plans. | C2, C2 | | |
| e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure. | C3, D1c, D1d, D1f, D1d, Elb | | |
| f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure. | C4, D2c, D2d D2j | | |
| g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action) | C2a | | |
| h. Other: | | | |
| | | | |
| 18. Consistency with Community Character The proposed project is inconsistent with the existing community character. (See Part 1. C.2, C.3, D.2, E.3) If "Yes", answer questions a - g. If "No", proceed to Part 3. | □ NO | ΠY | ΈS |
| If Tes , unswer questions a - g. If No , proceed to Fart 5. | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may |
| a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community. | E3e, E3f, E3g | | occur |
| b. The proposed action may create a demand for additional community services (e.g. | C4 | | |
| schools, police and fire) | | | |
| | C2, C3, D1f D1g, E1a | | |
| schools, police and fire)c. The proposed action may displace affordable or low-income housing in an area where | C2, C3, D1f | | |
| schools, police and fire) c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing. d. The proposed action may interfere with the use or enjoyment of officially recognized | C2, C3, D1f D1g, E1a | | |
| schools, police and fire) c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing. d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources. e. The proposed action is inconsistent with the predominant architectural scale and | C2, C3, D1f D1g, E1a C2, E3 | | |

Project : Date :

Full Environmental Assessment Form Part 3 - Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

| Determination of Significance - Type 1 and Unlisted Actions | | | | |
|---|-----------------------------|------------|----------|--------|
| SEQR Status: | □ Type 1 | □ Unlisted | | |
| Identify portions of EAF | completed for this Project: | □ Part 1 | □ Part 2 | Part 3 |

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the

____as lead agency that:

Date:

Date:

0100

| | A. | This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact |
|-------|------|--|
| state | emei | t need not be prepared. Accordingly, this negative declaration is issued. |

 \square B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).

 \Box C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:

Name of Lead Agency:

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer:

| Signature of Responsible Officer in Lead Agency: | 'Vil |
|--|------|
|--|------|

Signature of Preparer (if different from Responsible Officer)

For Further Information:

Contact Person:

Address:

Telephone Number:

E-mail:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:

Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of) Other involved agencies (if any) Applicant (if any)

Environmental Notice Bulletin: <u>http://www.dec.ny.gov/enb/enb.html</u>



Parks, Recreation, and Historic Preservation

KATHY HOCHUL Governor ERIK KULLESEID Commissioner

June 1, 2022

Hany Ayoub Columbia University 615 West 131ST Street New York, NY 10027

Re: DEC Columbia University Housing 600 W 125th Street, New York, NY 10027 22PR03355 DEP # 22-C-7702-2

Dear Hany Ayoub:

Thank you for requesting the comments of the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted materials in accordance with the New York State Historic Preservation Act of 1980 (section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the Division for Historic Preservation and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (NY Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

We note that the project site is adjacent to the State and National Register eligible Tiemann East Historic District. We have reviewed the project description and supporting documentation that was provided to our office on May 18th, 2022. Based upon our review, it is OPRHP's opinion that the proposed work will have No Adverse Impact on historic resources, with the following condition:

 A Construction Protection Plan must be implemented for the 31 and 45 Tiemann Place, which are contributing buildings within the eligible historic district. Please refer to the National Park Service's "Tech Notes no. 3" for guidance on construction protection for historic buildings: <u>Tech-Notes-Protection03.pdf (nps.gov)</u>

If you have any questions, I am best reached via e-mail.

Sincerely,

) GBare

Olivia Brazee Historic Site Restoration Coordinator olivia.brazee@parks.ny.gov

via e-mail only

cc: Charles Vandrei, NYS DEC



SMART GROWTH IMPACT STATEMENT ASSESSMENT FORM

| Date: | May 9, 2023 |
|----------------------------------|--|
| Project Applicant: | Columbia University |
| Project Name: | 2023 Bond Financing |
| Program: | Independent Colleges and Universities Program |
| Project Location: | 600 West 125 th Street, Borough of Manhattan, New York County, New York, and other various buildings or facilities located throughout the Columbia University system, at or in the vicinity of Columbia University's Manhattanville, Morningside Heights, and Irving Medical Center campuses in the Borough of Manhattan, New York County, New York (see attached list of Columbia University DASNY Series 2023 New Money Projects) |
| Project Number: Completed by: | 377760 Sara E. Stein, AICP, LEED-AP |

This Smart Growth Impact Statement Assessment Form ("SGISAF") is a tool to assist the applicant and the Dormitory Authority of the State of New York's ("DASNY's") Smart Growth Advisory Committee in deliberations to determine whether a project is consistent with the New York *State Smart Growth Public Infrastructure Policy Act ("SSGPIPA")*, Article 6 of the New York State *Environmental Conservation Law ("ECL")*.¹ Not all questions/answers may be relevant or applicable to all projects.

Description of Proposed Action and Proposed Project:

The Dormitory Authority of the State of New York ("DASNY") has received a funding request from Columbia University for its *2023 Bond Financing* (the "Proposed Project"), pursuant to DASNY's Independent Colleges and Universities Program, and would include the construction of an approximately 177,000-gross-square-foot ("gsf"), 34-story, mixed-use residential and commercial building to house graduate students and faculty members at 600 West 125th Street in the borough of Manhattan, New York County, New York, on the southwest corner of 125th Street and Broadway, across from the Manhattanville campus ("New Mixed-Use Residential Building").

In addition, Columbia University's 2023 Bond Financing would also be used to finance or refinance all or a portion of the cost of various institution-wide renovation, rehabilitation, equipment purchase, design and refinancing projects located in buildings or facilities throughout the Columbia University system, at or in the vicinity of its Manhattanville, Morningside Heights, and Irving Medical Center campuses in the Borough of Manhattan, New York County, New York (refer to attached list of projects). The bond funds would also be used to refund all or a portion of DASNY's outstanding Columbia University Insured Revenue Bonds, Series 2011A (the "Series 2011A Bonds").

The Proposed Action would consist of DASNY's authorization of the issuance of one or more series of fixedand/or variable-rate, tax-exempt and/or taxable Series 2023 bonds in an amount not to exceed \$325,000,000 to be sold at one or more times through a negotiated offering and/or a private placement, on behalf of the University, for the Proposed Project.

Smart Growth Impact Assessment: Have any other entities issued a Smart Growth Impact Statement ("SGIS") with regard to this project? (If so, attach same).

¹ <u>https://www.nysenate.gov/legislation/laws/ENV/A6</u>

1. Does the project advance or otherwise involve the use of, maintain, or improve existing infrastructure? Check one and describe: ☐ Yes ☐ No ☐ Not Relevant

The Proposed Project is located in an urban area with existing access to public transportation and municipal infrastructure (i.e., water supply and sewer service). The Proposed Project components would receive water, sewer, gas and electric utilities from existing infrastructure serving the area. Therefore, the Proposed Project would be supportive of this criterion.

- 2. Is the project located wholly or partially in a **municipal center**,² characterized by any of the following: Check all that apply and explain briefly:
 - A city or a village

Within the boundaries of a generally-recognized college, university, hospital or nursing-home campus

Area of concentrated and mixed land use that serves as a center for various activities including, but not limited to: **see below**

- Central business districts (i.e., commercial or geographic heart of a city, downtown or "city center)
 Main streets (i.e., primary retail street of a village, town, or small city)
- Downtown areas (i.e., city's core, center or central business district)
- Brownfield opportunity areas (<u>https://www.dos.ny.gov/opd/programs/brownFieldOpp/index.html</u>)
- Downtown areas of Local Waterfront Revitalization Programs ("LWRPs") (https://www.dos.ny.gov/opd/programs//wrp.html)
- Transit-oriented development areas (i.e., areas with access to public transit for residents)
 - Environmental justice areas (<u>https://www.dec.ny.gov/public/911.html</u>)
- Hardship areas

The project site for the New Mixed-Use Residential Building is located across from Columbia University's Manhattanville Campus, within the borough of Manhattan, New York County, New York. All of the institution-wide renovation, rehabilitation, equipment purchase, design and/or refinancing projects are located in buildings or facilities throughout the Columbia University system. Therefore, the Proposed Project would be supportive of this criterion.

3. Is the project located adjacent to municipal centers (please see characteristics in question 2, above) with clearly-defined borders, in an area designated for concentrated development in the future by a municipal or regional comprehensive plan that exhibits strong land use, transportation, infrastructure and economic connections to an existing municipal center? Check one and describe:

This is not relevant because the project is consistent with criterion 2 above.

4. Is the project located in an area designated by a municipal or comprehensive plan, and appropriately zoned, as a future municipal center? Check one and describe: □ Yes □ No □ Not Relevant

This is not relevant because the project is consistent with criterion 2 above.

This is not relevant because the project is consistent with criterion 2 above.

6. Does the project preserve and enhance the state's resources, including agricultural lands, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and/or significant historic and archeological resources? Check one and describe: ⊠ Yes □ No □ Not Relevant

The New Mixed-Use Residential Building would be constructed in an urban area on a previously developed property. No significant adverse impacts would occur to any of the state's resources as a result of the Proposed Project. Therefore, the Proposed Project is generally supportive of this criterion.

² DASNY interprets the term "municipal centers" to include existing, developed institutional campuses such as universities, colleges and hospitals.

7. Does the project foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and/or the integration of all income and age groups? Check one and describe: ⊠ Yes □ No □ Not Relevant

The New Mixed-Use Residential Building would house graduate students and faculty members and would be located next to Columbia University's Manhattanville Campus. The Manhattanville Mixed-Use Special District allows for greater density, and a wider variety of land uses to facilitate commercial and residential development, encourages active ground floor uses, provides east-west visual and pedestrian connections, and requires publicly accessible open spaces, sidewalk amenities, sidewalk widening and landscaping. Therefore, the Proposed Project would be generally supportive of this criterion.

8. Does the project provide mobility through transportation choices, including improved public transportation and reduced automobile dependency? Check one and describe: 🛛 Yes 🗌 No 🗌 Not Relevant

The Proposed Project is located in an urban area with existing access to public transportation. The Proposed Project is not expected to result in a substantial increase in traffic or generate substantial new demand for transportation facilities or services. The new building project site is within walking distance (1/2 mile) via existing sidewalks to public transportation options. Therefore, the Proposed Project would be supportive of this criterion.

9. Does the project demonstrate coordination among state, regional, and local planning and governmental officials?³ Check one and describe: X Yes No Not Relevant

DASNY, acting as lead agency, is conducting a coordinated review of the Proposed Project in accordance with New York's *State Environmental Quality Review Act ("SEQRA")*. The New York State Department of Environmental Conservation ("NYSDEC") and the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), among others, were included in DASNY's coordinated review process. The *SEQR* lead agency establishment regulations set a 30-day time period, or less upon agreement, for each involved agency or interested party to review the documents and provide any comments, concerns or the nature of their approval. Therefore, the Proposed Project would be supportive of this criterion.

10. Does the project involve community-based planning and collaboration? Check one and describe: ☐ Yes ⊠ No ☐ Not Relevant

The Proposed Project was contemplated during the development of Columbia University's Manhattanville Campus, which involved extensive community-based planning, outreach, and collaboration.

11. Is the project consistent with local building and land use codes? Check one and describe: ⊠ Yes □ No □ Not Relevant

The Proposed Project would be consistent with all local building and land use codes. The New Mixed-Use Residential Building is being constructed as of right and would conform with all applicable Federal, State and local laws and regulations. Therefore, the Proposed Project would be generally supportive of this criterion.

12. Does the project promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations? Check one and describe: X Yes No Not Relevant

The New Mixed-Use Residential Building would incorporate numerous environmental sustainability measures that would promote this criterion. It is expected that the project components would be designed consistent with LEED[®] "Gold" requirements. Therefore, the Proposed Project would be supportive of this criterion.

³ Demonstration may include *State Environmental Quality Review ["SEQR"]* coordination with involved and interested agencies, district formation, agreements between involved parties, letters of support, State Pollutant Discharge Elimination System ["SPDES"] permit issuance/revision notices, etc.

13. During the development of the project, was there broad-based public involvement?⁴ Check one and describe: ⊠ Yes □ No □ Not Relevant

As previously noted, DASNY, acting as lead agency, is conducting a coordinated review of the Proposed Project in accordance with *SEQRA*. Other involved and interested agencies include the NYSDEC and OPRHP, among others. Hence, the Proposed Project would be generally supportive of this criterion.

14. Does the Recipient have an ongoing governance structure to sustain the implementation of community planning? Check one and describe: X Yes No Not Relevant

Columbia University is a private university with a long-standing history of working with and investing in the local community. The University supports a wide range of activities and local initiatives, programs and services ranging from supporting minority-, women- and locally-owned businesses and construction workforce, to raising money for local charities, to mentoring high school students. For its Manhattanville campus, the University has two major agreements that codify the University's commitment to new investment in the local community, including the Community Benefits Agreement, in partnership with the West Harlem Development Corporation, and the Declaration of Covenants and Restrictions with Empire State Development ("ESD"). The Proposed Project would be generally supportive of this criterion.

15. Does the project mitigate future physical climate risk due to sea level rise, and/or storm surges and/or flooding, based on available data predicting the likelihood of future extreme weather events, including hazard risk analysis data if applicable? Check one and describe: ⊠ Yes □ No □ Not Relevant

According to the NYSDEC's Environmental Resource Mapper, the project site for the New Mixed-Use Residential Building is not located within the 100-year and 500-year floodplain boundaries. The new building would be constructed on a previously disturbed/developed site. Floodplain storage capacity would not be impacted by this project. The Proposed Project would incorporate design features intended to mitigate flood and hazard risks as needed. Therefore, the Proposed Project would be consistent with this criterion.

DASNY has reviewed the available information regarding this project and finds:

 \boxtimes The project was developed in general consistency with the relevant Smart Growth Criteria.

The project was not developed in general consistency with the relevant Smart Growth Criteria.

It was impracticable to develop this project in a manner consistent with the relevant Smart Growth Criteria for the following reasons:

ATTESTATION

I, President of DASNY/designee of the President of DASNY, hereby attest that the Proposed Project, to the extent practicable, meets the relevant criteria set forth above and that to the extent that it is not practical to meet any relevant criterion, for the reasons given above.

5/9/2023

Signature/Date

Robert S. Derico, R.A., Director, Office of Environmental Affairs **Print Name and Title**

⁴ Documentation may include *SEQR* coordination with involved and interested agencies, SPDES permit issuance/revision notice, approval of Bond Resolution, formation of district, evidence of public hearings, *Environmental Notice Bulletin ["ENB"]* or other published notices, letters of support, etc.

Columbia University New York, New York

Program: Independent Colleges & Universities

New Issue Details

One or more series of fixed and/or variable rate, taxexempt and/or taxable bonds in an amount not to exceed \$325,000,000 with maturities not to exceed 35 years are to be sold at one or more times through a negotiated offering and/or a private placement.

- Senior Manager Goldman Sachs & Co.
- Co-Bond Counsel Nixon Peabody LLP and Drohan Lee LLP
- Underwriter's Counsel Katten Muchin Rosenman LLP

Purpose:

- Financing the costs associated with various construction and renovation projects including a new 34-story building to house graduate students and faculty members on the southwest corner of 125th Street and Broadway in Manhattan (\$200.0 million).
- Refinancing of taxable commercial paper issued by Columbia, the proceeds of which were used to redeem the University's Series 2011A Bonds issued by DASNY (\$125.0 million).

Security:

• General obligation of the University.

| Current Ratings: | Moody's: Aaa |
|------------------|--------------|
| · · | S&P: AAA |
| | Fitch: NR |

Overview

Columbia University is a privately endowed, nonsectarian, nonprofit institution of higher education. Known originally as King's College, the University was founded under a charter granted in 1754 by King George II. Today, the University is one of the largest private institutions of higher education in the United States. Instruction and research are carried out in 17 component schools located at three primary sites in New York City and several additional sites outside the City. The University is formally affiliated with several neighboring institutions, including Barnard College, Teachers College and Union Theological Seminary.

The University offers degree and certificate programs through 17 faculties and schools, consisting of Columbia College, its original school, the School of General Studies (a liberal arts college for non-traditional students), and the 15 professional or specialized divisions whose programs supplement the liberal arts curricula. The University offers bachelor's degrees in 95 subject areas, master's degrees in 239 subject areas, doctoral degrees in 91 academic fields, and 75 certificate programs.

The University's professional and specialized divisions include the schools of Columbia University Irving Medical Center (CUIMC), the School of Law founded in 1858, the



Purpose: New Money / Refinancing

May 2, 2023

Fu Foundation School of Engineering and Applied Science founded in 1864, the Graduate School of Arts and Sciences founded in 1820 and the Graduate School of Business founded in 1916. CUIMC comprises the University's College of Physicians and Surgeons founded in 1767 (the second oldest medical school in the country and the first to grant an M.D. degree), the School of Nursing founded in 1892, Mailman School of Public Health founded in 1922 and the College of Dental Medicine founded in 1916.

The University is a member of numerous professional associations, including the Association of American Universities, and is accredited by the Middle States Commission on Higher Education. In addition, ten of its professional schools hold separate accreditation from their respective professional associations.

On January 18, 2023, Columbia named Nemat "Minouche" Shafik as the next President of the University, replacing Lee C. Bollinger who will be stepping down at the end of the 2022-23 academic year.

Description of the Bonds

- The Bonds are a special obligation of DASNY.
- The Loan Agreement is a general obligation of the University.
- The Bonds are payable from payments made under the Loan Agreement and all funds and accounts established under the Resolution.

Approvals

- DASNY Resolution to Proceed April 12, 2023
- PACB Approval April 19, 2023
- TEFRA Hearing May 3, 2023*
- SEQR Filing May 8, 2023*
 *Anticipated date.

Recommendation

Staff recommends that the Board adopt the necessary documents for one or more series of bonds with maturities not to exceed 35 years in an amount not to exceed \$325,000,000.

This report was prepared solely to assist DASNY in its review and approval of the proposed financing described therein and must not be relied upon by any person for any other purpose. DASNY does not warrant the accuracy of the statements contained in any offering document or any other materials relating to or provided by the Institution in connection with the sale or offering of the Bonds, nor does it directly or indirectly guarantee, endorse or warrant (1) the creditworthiness or credit standing of the Institution, (2) the

Transaction Summary Update

Columbia University New York, New York

May 2, 2023

Purpose: New Money / Refinancing

Program: Independent Colleges & Universities

sufficiency of the security for the Bonds or (3) the value or investment quality of the Bonds.

The Bonds are special limited obligations of DASNY that are secured only by the amounts required to be paid by the Institution pursuant to the Loan Agreement, certain funds established under the Resolution and other property, if any, pledged by the Institution as security for the Bonds.



Columbia University New York, New York

Program: Independent Colleges & Universities

New Issue Details

Approximately \$306,830,000 in fixed and/or variable rate, tax-exempt and/or taxable bonds with maturities not to exceed 35 years are to be sold at one or more times through a negotiated offering and/or a private placement.

- Senior Manager To be determined
- Co-Bond Counsel Nixon Peabody LLP and Drohan Lee LLP
- Underwriter's Counsel *To be determined*

Purpose:

- Financing the costs associated with various construction and renovation projects including a new 34-story building to house graduate students and faculty members on the southwest corner of 125th Street and Broadway in Manhattan (\$200.0 million).
- Refinancing of taxable commercial paper issued by Columbia, the proceeds of which were used to redeem University's Series 2011A Bonds issued by DASNY (\$125.0 million).

Security:

• General obligation of the University.

Current Ratings: Moody's: Aaa S&P: AAA Fitch: NR

Overview

Columbia University is a privately endowed, nonsectarian, nonprofit institution of higher education. Known originally as King's College, the University was founded under a charter granted in 1754 by King George II. Today, the University is one of the largest private institutions of higher education in the United States. Instruction and research are carried out in 17 component schools located at three primary sites in New York City and several additional sites outside the City. The University is formally affiliated with several neighboring institutions, including Barnard College, Teachers College and Union Theological Seminary.

The University offers degree and certificate programs through 17 faculties and schools, consisting of Columbia College, its original school, the School of General Studies (a liberal arts college for non-traditional students), and the 15 professional or specialized divisions whose programs supplement the liberal arts curricula. The University offers bachelor's degrees in 95 subject areas, master's degrees in 239 subject areas, doctoral degrees in 91 academic fields, and 75 certificate programs.

The University's professional and specialized divisions include the schools of Columbia University Irving Medical Center (CUIMC), the School of Law founded in 1858, the Fu Foundation School of Engineering and Applied Science founded in 1864, the Graduate School of Arts and Sciences

Purpose: New Money / Refinancing

April 4, 2023

founded in 1820 and the Graduate School of Business founded in 1916. CUIMC comprises the University's College of Physicians and Surgeons founded in 1767 (the second oldest medical school in the country and the first to grant an M.D. degree), the School of Nursing founded in 1892, Mailman School of Public Health founded in 1922 and the College of Dental Medicine founded in 1916.

The University is a member of numerous professional associations, including the Association of American Universities, and is accredited by the Middle States Commission on Higher Education. In addition, ten of its professional schools hold separate accreditation from their respective professional associations.

On January 18, 2023, Columbia named Nemat "Minouche" Shafik as the next President of the University, replacing Lee C. Bollinger who will be stepping down at the end of the 2022-23 academic year.

Additional Information

- <u>Demand & Enrollment</u> Columbia University attracts highly qualified students and is among the most selective universities in the country. Of the 60,377 applicants for fall 2022, just 2,255 were accepted, indicating an acceptance rate of 3.7%. Full-time Equivalent enrollment totaled 31,802 for fall 2022, an increase of 9.4% over five years.
- <u>Operations</u> For fiscal year 2022, Columbia reported operating revenues of \$6.03 billion and an operating surplus of \$551.0 million. Following two years of operations that were negatively impacted by the COVID-19 pandemic, the adjusted operating margin of 10.0% for fiscal year 2022 was a five-year high for the University.
- <u>Revenue Diversification</u> The University's overall revenue mix is diverse, making it less vulnerable to fluctuations from a single revenue source. For fiscal year 2022, 24% of the University's total operating revenues came from net tuition and fees.
- <u>Financial Resources</u> Total Net Assets have increased by \$2.64 billion, or 16.7%, since fiscal year 2018. This growth has occurred mainly due to positive operating results, fundraising, and investment appreciation.
- <u>Fundraising</u> Fundraising has allowed the University to make substantial capital investment without significantly impacting leverage.

Recommendation

Staff recommends that the Board adopt a Resolution to Proceed for one or more series of bonds in an amount not to exceed \$325,000,000.



Transaction Summary

Columbia University New York, New York

Program: Independent Colleges & Universities

This report was prepared solely to assist DASNY in its review and approval of the proposed financing described therein and must not be relied upon by any person for any other purpose. DASNY does not warrant the accuracy of the statements contained in any offering document or any other materials relating to or provided by the Institution in connection with the sale or offering of the Bonds, nor does it directly or indirectly guarantee, endorse or warrant (1) the creditworthiness or credit standing of the Institution, (2) the sufficiency of the security for the Bonds or (3) the value or investment quality of the Bonds.

The Bonds are special limited obligations of DASNY that are secured only by the amounts required to be paid by the Institution pursuant to the Loan Agreement, certain funds established under the Resolution and other property, if any, pledged by the Institution as security for the Bonds. April 4, 2023

Purpose: New Money / Refinancing





Transaction Report Columbia University

INSTITUTION: Columbia University is a privately endowed, nonsectarian, nonprofit institution of higher education. Known originally as King's College, the University was founded under a charter granted in 1754 by King George II. Today, the University is one of the largest private institutions of higher education in the United States. Instruction and research are carried out in 17 component schools located at three primary sites in New York City and several additional sites outside the City. The University is formally affiliated with several neighboring institutions, including Barnard College, Teachers College and Union Theological Seminary.

The University offers degree and certificate programs through 17 faculties and schools, consisting of Columbia College, its original school, the School of General Studies (a liberal arts college for non-traditional students), and the 15 professional or specialized divisions whose programs supplement the liberal arts curricula. The University offers bachelor's degrees in 95 subject areas, master's degrees in 239 subject areas, doctoral degrees in 91 academic fields, and 75 certificate programs.

The University's professional and specialized divisions include the schools of Columbia University Irving Medical Center (CUIMC), the School of Law founded in 1858, the Fu Foundation School of Engineering and Applied Science founded in 1864, the Graduate School of Arts and Sciences founded in 1820 and the Graduate School of Business founded in 1916. CUIMC comprises the University's College of Physicians and Surgeons founded in 1767 (the second oldest medical school in the country and the first to grant an M.D. degree), the School of Nursing founded in 1892, Mailman School of Public Health founded in 1922 and the College of Dental Medicine founded in 1916.

The University is a member of numerous professional associations, including the Association of American Universities, and is accredited by the Middle States Commission on Higher Education. In addition, ten of its professional schools hold separate accreditation from their respective professional associations.

On January 18, 2023, Columbia named Nemat "Minouche" Shafik as the next President of the University, replacing Lee C. Bollinger who will be stepping down at the end of the 2022-23 academic year.

DASNY FINANCING HISTORY: The University has been a client of DASNY since 1963. Over the last 60 years, DASNY has issued 40 separate obligations on behalf of the University totaling over \$4.0 billion.

As of January 31, 2023, approximately \$1.2 billion in DASNY debt issued on behalf of Columbia University remained outstanding as shown in Table 1 below:

| Table 1 Outstanding DASNY Debt | | | | | | |
|--------------------------------|------------|----------------|----------------|--|--|--|
| | Defeasance | Amount | Amount | | | |
| | or | Issued | Outstanding | | | |
| Series | Maturity | <u>(000's)</u> | <u>(000's)</u> | | | |
| 1963 through 1994 | - | \$ 846,809 | - | | | |
| 1997 CP | 2015 | 55,780 | - | | | |
| 1998 | 2006 | 79,225 | - | | | |
| 2000A | 2011 | 121,700 | - | | | |
| 2002A | 2012 | 34,245 | - | | | |
| 2002B | 2012 | 96,700 | - | | | |
| 2002C | 2027 | 23,300 | 23,300 | | | |
| 2003A | 2012 | 87,775 | - | | | |
| 2003B | 2028 | 30,000 | 30,000 | | | |
| 2004A1 | 2007 | 22,765 | - | | | |
| 2004A2 | 2014 | 51,935 | - | | | |
| 2004B | 2014 | 100,000 | - | | | |
| 2004C | 2017 | 50,000 | - | | | |
| 2006A | 2016 | 225,000 | - | | | |
| 2006B | 2016 | 156,890 | - | | | |
| 2008A | 2018 | 282,715 | - | | | |
| 2009A | 2039 | 117,000 | 117,000 | | | |
| 2011A | 2021 | 300,000 | - | | | |
| 2012A | 2022 | 137,935 | - | | | |
| 2015A | 2045 | 92,535 | 92,535 | | | |
| 2015B | 2024 | 47,780 | 9,210 | | | |
| 2016A-1 | 2026 | 50,000 | 50,000 | | | |
| 2016A-2 | 2046 | 130,000 | 130,000 | | | |
| 2016B | 2031 | 209,705 | 93,550 | | | |
| 2017A | 2047 | 150,000 | 150,000 | | | |
| 2017B | 2029 | 40,475 | 40,475 | | | |
| 2018A | 2048 | 150,000 | 150,000 | | | |
| 2018B | 2038 | 175,185 | 175,185 | | | |
| 2020A | 2050 | 150,000 | 150,000 | | | |
| | | \$ 4,015,454 | \$ 1,211,255 | | | |

The University has always met its obligations to DASNY on time and in full.



<u>THE PROJECT</u>: Proceeds from the proposed issuance will be used to finance and/or reimburse the University for costs associated with various construction and renovation projects at the Morningside Heights, Medical Center, and Manhattanville campuses.

The new construction to be financed will consist of a 34-story building to house graduate students and faculty members on the southwest corner of 125th Street and Broadway in Manhattan. The new building will be comprised of approximately 177,000 square feet and include 142 apartments and 5,000 square feet of retail space on the ground level. The project is expected to be certified LEED Gold, with notable sustainability features including a highperformance façade, optimized equipment efficiency, limited gas usage to achieve long-term carbon emissions reductions, vegetated roofs, and stormwater detention. The project started in Spring 2021 with excavation and foundation work, followed by reinforced concrete superstructure construction and curtain wall installation. Construction is expected to be completed in 2024.

Other projects to be financed may include various renovation, deferred maintenance, and replacement projects located at various facilities across the Columbia system.

THE REFINANCING PLAN: Proceeds from the proposed issuance are also expected to refinance approximately \$125 million of taxable commercial paper issued by Columbia, the proceeds of which were used to redeem the University's Series 2011A Bonds issued by DASNY.

FINANCING DETAILS: Bond proceeds of approximately \$325.0 million are expected to be deposited to the project fund. Costs of Issuance and the Underwriter's Discount are approximated in the range of \$1.5 million. Completing the plan of finance will require a bond issue of approximately \$306.8 million. A table of the estimated sources and uses of funds is provided in Attachment I.

Ratings: Moody's Investors Service has assigned a rating of "Aaa" to the outstanding obligations of the University with a "Stable Outlook". Standard & Poor's has rated the University's obligations "AAA" with a "Stable Outlook".

Security Provisions: It is anticipated that the Loan Agreement will be a general unsecured obligation of the University and no security interest in any revenues or assets of the University will be granted by the University to DASNY under the Loan Agreement.



| Table 2 – Selected Enrollment Statistics | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|--|
| | <u>2018-19</u> | <u>2019-20</u> | <u>2020-21</u> | <u>2021-22</u> | <u>2022-23</u> | |
| First-time Freshman Applications Received | 40,203 | 42,569 | 40,084 | 60,551 | 60,377 | |
| First-time Freshman Applications Accepted | 2,260 | 2,245 | 2,544 | 2,355 | 2,255 | |
| Undergraduate Acceptance Ratio | 5.6% | 5.3% | 6.3% | 3.9% | 3.7% | |
| First-time Freshman Applicants Enrolled | 1,423 | 1,392 | 1,454 | 1,560 | 1,463 | |
| Undergraduate Matriculation Ratio | 63.0% | 62.0% | 57.2% | 66.2% | 64.9% | |
| Mean SAT Scores (Entering Freshmen) | 1,490 | 1,500 | 1,500 | 1,514 | 1,524 | |
| Headcount Enrollment | | | | | | |
| Full-Time | 27,094 | 27,593 | 24,238 | 29,703 | 29,390 | |
| Part-Time | <u>5,939</u> | <u>5,878</u> | <u>7,893</u> | <u>5,641</u> | <u>7,237</u> | |
| Total | 33,033 | 33,471 | 32,131 | 35,344 | 36,627 | |
| Full-time Equivalent Enrollment | | | | | | |
| Undergraduate | 8,462 | 8,551 | 8,459 | 8,980 | 9,141 | |
| Graduate | <u>20,612</u> | <u>21,002</u> | <u>18,410</u> | <u>22,573</u> | <u>22,661</u> | |
| Total | 29,074 | 29,553 | 26,869 | 31,553 | 31,802 | |

FEASIBILITY - ENROLLMENT ANALYSIS: Columbia University attracts highly qualified students and is among the most selective universities in the country. Applications received have increased by 50% over the last five years, from 40,203 in fall 2018 to 60,377 for fall 2022. Following a slight decline in applications for fall 2020 due to the COVID-19 pandemic, the University experienced a significant rebound in fall 2021 with new students applying as well as those who had deferred the prior fall. A large portion of deferrals included international students that were subject to travel restrictions. Of the 60,377 applicants for fall 2022, just 2,255 were accepted, indicating an acceptance rate of 3.7%. Of those applicants accepted, 1,463 chose to attend, resulting in a matriculation rate of 64.9%. Mean SAT scores for incoming freshman were 1,524 for fall 2022.

Columbia reported total Full-time Equivalent enrollment of 31,802 for fall 2022, an increase of 9.4% over five years. The University experienced a one-year decline in enrollment for the 2020-2021 fiscal year due to the pandemic. During that period all undergraduate courses were virtual, while 40% of all graduate courses were offered in hybrid or in-person form. Classes resumed fully in person beginning in fall 2021. FTE enrollment increased in both fall 2021 and fall 2022, reaching a five-year high for the University. Graduate and professional students currently represent just over 70% of total FTE enrollment, which has remained consistent in recent years.

The University has the financial resources to maintain a policy of accepting the most qualified students regardless

of financial need. Institutionally funded financial aid has increased by approximately 21% over the last five years, from \$432.7 million in fiscal year 2018 to \$524.6 million in fiscal year 2022. During that five-year period the University's tuition discount rate has averaged approximately 28%, below the 2022 DASNY median of 29.8%.

Columbia draws international students from more than 150 countries. As Columbia's applicant pool has grown over the past five years, the enrolled population has become more geographically and demographically diverse.

The chart that follows illustrates the University's FTE enrollment for the past five years.





| Table 3 – Selected Operating Statistics | | | | | | | |
|--|------------------|----------------|------------------|------------------|------------------|--|--|
| (dollars in thousands) | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | | |
| Total operating revenue | \$4,822,541 | \$4,970,867 | \$5,030,214 | \$5,037,610 | \$6,028,952 | | |
| Total operating expense | <u>4,596,899</u> | 4,817,559 | <u>5,037,252</u> | <u>5,044,326</u> | <u>5,477,975</u> | | |
| Change in net assets from operations | 225,642 | 153,308 | (7,038) | (6,716) | 550,977 | | |
| Total non-operating activities | <u>58,608</u> | <u>160,293</u> | <u>(32,992)</u> | <u>999,467</u> | <u>(503,130)</u> | | |
| Change in unrestricted net assets | 284,250 | 313,601 | (40,030) | 992,751 | 47,847 | | |
| Plus: Total depreciation/amortization | 278,897 | 289,998 | 292,769 | 290,839 | 329,390 | | |
| Plus: Total interest paid (expense) | <u>82,481</u> | <u>87,686</u> | <u>87,471</u> | <u>103,456</u> | <u>92,540</u> | | |
| Adjusted change in net assets | \$645,628 | \$691,285 | \$340,210 | \$1,387,046 | \$469,777 | | |
| Cash provided by operating activities | \$815,085 | \$486,067 | \$590,435 | \$828,192 | \$911,028 | | |
| Total annual debt service | \$140,026 | \$148,515 | \$169,404 | \$194,882 | \$238,987 | | |
| Adjusted Operating Margin (DASNY 2022 Median: 3.3%) | 0.3% | 1.5% | -1.0% | 0.3% | 10.0% | | |
| Adjusted Net Income Margin (DASNY 2022 Median: 3.0%) | 1.6% | 0.6% | -1.6% | 20.1% | 1.7% | | |
| Debt Service to Operating Expenses (DASNY 2022 Median: 3.8%) | 3.0% | 3.4% | 3.4% | 3.9% | 4.4% | | |
| Annual Debt Service Coverage (DASNY 2022 Median: 2.3:1) | 2.7 | 3.0 | 2.0 | 2.1 | 4.3 | | |

FEASIBILITY - OPERATIONS ANALYSIS: For fiscal year 2022, Columbia reported operating revenues of \$6.03 billion and an operating surplus of \$551.0 million. The adjusted operating margin of 10.0% was a five-year high for the University. The improvement for fiscal year 2022 was the result of a rebound in tuition and auxiliary revenues from higher enrollment in fall 2021 as well as increased clinical volume from the University's faculty practice plan.

During fiscal years 2020 and 2021, the University's operations were negatively impacted by the COVID-19 pandemic. Operating revenue was negatively impacted in a few different areas. Tuition and fee revenue declined due to lower enrollment, auxiliary revenue declined due to lower dorm occupancy, and lower clinical visits and elective surgical procedures led to a loss of patient care revenue. Lower revenues were somewhat offset by the receipt of federal stimulus funds as well as expense reductions including a hiring freeze, reductions in non-personnel spending, and lower capital spending. Operating expenses were essentially flat between fiscal year 2020 and fiscal year 2021.

The University reported positive net income results in four of the last five years. Year-to-year fluctuations are largely due to realized and unrealized investment returns from Columbia's investment portfolio. For fiscal year 2021, investment gains of \$1.10 billion contributed to a positive change in unrestricted net assets of \$992.8 million while unrealized investment losses of \$488.3 million in fiscal year 2022 led to a bottom line of \$47.8 million, offsetting some of the operating surplus for that fiscal year.

Cash from operations has averaged \$726.2 million over the last five years, resulting in a Cash Income Ratio averaging 14.4% annually.

As illustrated in the chart that follows, the University's overall revenue mix is diverse, making it less vulnerable to fluctuations from a single revenue source. For fiscal year 2022, 24% of the University's total operating revenues came from net tuition and fees. At 25%, patient care

revenue represented the largest revenue category. Patient care activities relate to four distinct areas: medical faculty practice plans, affiliation agreements, and medical and professional service agreements, and dental clinic. In fiscal year 2022, medical faculty practice revenues of \$926.0 million were the largest component of patient care revenues, followed by revenue from affiliation agreements at \$446.4 million. The University maintains several clinical and educational affiliations, the most significant of which are with New York-Presbyterian Hospital, Lawrence Hospital, and Harlem Hospital. Government grants and contracts for research activities comprised 20%, investment returns 7%, receipts from other educational and research activities (largely royalty and license income from patents) made up 4%, and private gifts, grants, and contracts 6% of revenues.



Since 2018, the University has demonstrated an average annual debt coverage ratio of 2.8:1.



| Table 4 – Selected Financial Position Statistics | | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|--|
| (dollars in thousands) | <u>2018</u> | <u>2019</u> | <u>2020</u> | <u>2021</u> | <u>2022</u> | |
| Total Assets | \$19,714,935 | \$19,975,879 | \$21,330,738 | \$24,696,622 | \$23,231,005 | |
| Total Liabilities | 3,919,591 | 3,948,652 | 5,037,216 | 5,070,712 | 4,797,774 | |
| Net Assets | | | | | | |
| Unrestricted | 7,192,615 | 7,307,924 | 7,262,728 | 8,255,479 | 8,303,326 | |
| Temporarily Restricted | 4,815,877 | 4,726,496 | 5,369,068 | 7,527,698 | 6,067,470 | |
| Permanently Restricted | 3,786,852 | 3,992,807 | 3,661,726 | 3,842,733 | 4,062,435 | |
| Total Net Assets | \$15,795,344 | \$16,027,227 | \$16,293,522 | \$19,625,910 | \$18,433,231 | |
| Long-Term Debt | \$2,084,285 | \$2,000,200 | \$2,533,486 | \$2,488,870 | \$2,316,548 | |
| Total Cash & Investments to Operating Expenses (DASNY 2022 Median: 1.5:1) | 2.7 | 2.8 | 2.6 | 3.3 | 2.7 | |
| Total Cash & Investments to Total Debt (DASNY 2022 Median: 2.0:1) | 5.5 | 5.8 | 5.0 | 5.6 | 5.5 | |
| Total Cash & Investments per Student | \$429,039 | \$425,694 | \$449,975 | \$614,348 | \$475,083 | |
| | | | | | | |

FEASIBILITY - BALANCE SHEET ANALYSIS: The University reported total net assets of \$18.43 billion at fiscal year-end 2022, of which \$8.30 billion were unrestricted. Total Net Assets have increased by \$2.64 billion, or 16.7%, since fiscal year 2018. This growth has occurred mainly due to positive operating results (despite lower operating margins during the pandemic), fundraising, and investment appreciation.

The University's liquidity ratios compare favorably with the 2022 DASNY medians. For fiscal year 2022, Columbia reported Total Cash & Investments to Operating Expenses of 2.7:1 (1.5:1 DASNY Median) and Total Cash & Investments to Total Debt of 5.5:1 (2.0:1 DASNY Median).

The following graph illustrates the University's Total Cash and Investments per Student, which has averaged over \$478,000 for the past five years.



FUNDRAISING: In early 2022, Columbia announced the successful completion of "The Columbia Commitment", a five-year University-wide campaign that raised \$5.6 billion through the support of nearly 200,000 donors and 160,000 alumni. The campaign, which was launched in 2016, helped support priorities like the elimination of debt for medical students, the construction of the business school's new home in Manhattanville, the establishment of the African American and Diaspora Studies Department, the creation of the Columbia Climate School, and the advancement of cancer research and clinical care at Columbia University Irving Medical Center. Fundraising has allowed the University to make substantial capital investment without significantly impacting leverage.

INVESTMENTS: The University's endowment consists of approximately 6,200 separate funds established over many years for a wide variety of purposes. At fiscal year end 2022, Columbia reported investments with a total market value of just under \$14.28 billion, of which \$13.28 billion represents the University's endowment. The chart that follows presents the composition of the University's investment portfolio with market valuations as of June 30, 2022.



The University's current endowment spending rule is based on two factors: (1) the market value multiplied by a target spending rate of 4.5%, which receives a 40%



weighting (providing a response to investment market conditions); and (2) the prior year's spending with an inflation factor, which receives a 60% weighting (tying spending increases to operating needs and cushioning spending against market volatility). This allows the University to maintain the purchasing power of the endowment assets held in perpetuity or for a specified term as well as to provide additional real growth through new gifts and investment return.

The University's endowment includes a significant residential real estate portfolio consisting of properties proximate to the Morningside Heights and Washington Heights campuses providing housing to faculty, staff, and graduate students. Income from the rental properties in the portfolio is used to support operating costs. As of FYE 2022, the book value of the real estate was \$692.7 million.

SUMMARY: Staff recommends that the Board adopt the necessary documents for one or more series of bonds with terms not to exceed 35 years in an amount not to exceed \$325,000,000 on behalf of Columbia University.

This report was prepared solely to assist DASNY in its review and approval of the proposed financing described therein and must not be relied upon by any person for any other purpose. DASNY does not warrant the accuracy of the statements contained in any offering document or any other materials relating to or provided by the Institution in connection with the sale or offering of the Bonds, nor does it directly or indirectly guarantee, endorse or warrant (1) the creditworthiness or credit standing of the Institution, (2) the sufficiency of the security for the Bonds or (3) the value or investment quality of the Bonds.

The Bonds are special limited obligations of DASNY that are secured only by the amounts required to be paid by the Institution pursuant to the Loan Agreement, certain funds established under the Resolution and other property, if any, pledged by the Institution as security for the Bonds.



Columbia University Sources and Uses of Funds

Sources of Funds:

| Bond Proceeds Par Proceeds Original Issue Premium | \$ 306,830,000 19,649,578 | |
|---|---|----------|
| Total Sources | \$ 326,479,578 | |
| Uses of Funds: | | % of Par |
| Project Fund Deposits New Money Refinancing of Taxable Commercial Paper Costs of Issuance and Underwriter's Discount | \$ 200,000,000 125,028,000 1,451,578 | 0.47% |
| Total Uses | \$ 326,479,578 | |

Columbia University

Consolidated Financial Statements

Appendix A

June 30, 2018 through 2022

| | | Bala | nce Sheets | | | |
|---------------------------------------|----|------------|------------|------------|------------|------------|
| All Figures in 000's | | 2018 | 2019 | 2020 | 2021 | 2022 |
| Assets | | | | | | |
| Cash and Cash Equivalents | \$ | 1.006.998 | 814,040 | 974,112 | 754,556 | 714,875 |
| Accounts Receivable | Ŧ | 563,214 | 569,328 | 543,166 | 587,688 | 637,954 |
| Contributions Receivable | | 727,213 | 664,840 | 626,352 | 622,853 | 581,246 |
| Grants, Loans and Other Receivables | | 0 | 0 | 0 | 0 | (|
| Short-Term Investments | | 0 | 0 | 0 | 0 | (|
| Investments | | 11,194,432 | 11,562,591 | 12,324,012 | 15,752,353 | 14,275,431 |
| Property, Plant and Equipment, Net | | 4,475,642 | 4,714,266 | 4,908,522 | 5,027,166 | 5,053,175 |
| Deposits Held Under Debt Agreements | | 0 | 0 | 0 | 0 | (|
| Prepaid Expenses and Other Assets | | 1,747,436 | 1,650,814 | 1,954,574 | 1,643,762 | 1,687,517 |
| Right to Use Leased Property | _ | 0 | 0 | 0 | 308,244 | 280,807 |
| Total Assets | \$ | 19,714,935 | 19,975,879 | 21,330,738 | 24,696,622 | 23,231,00 |
| Liabilities | | | | | | |
| Accounts Payable and Accrued Expenses | \$ | 329,030 | 373,647 | 447,180 | 427,324 | 431,268 |
| Deposits and Deferred Revenues | | 274,599 | 289,643 | 342,345 | 400,923 | 412,843 |
| Federal Grants and Student Loans | | 78,720 | 79,862 | 62,400 | 54,346 | 43,749 |
| Pension and Postretirement Benefits | | 342,731 | 379,651 | 433,703 | 488,839 | 451,82 |
| Short-term Debt Obligations | | 0 | 0 | 0 | 0 | (|
| Long-Term Debt | | 2,084,285 | 2,000,200 | 2,533,486 | 2,488,870 | 2,316,548 |
| Lease Obligations | | 121,283 | 126,127 | 131,275 | 445,568 | 426,805 |
| Due to Related Organizations | | 0 | 0 | 0 | 0 | (|
| Asset Retirement Obligation | | 119,249 | 118,930 | 121,992 | 126,828 | 130,398 |
| Other Liabilities | _ | 569,694 | 580,592 | 964,835 | 638,014 | 584,336 |
| Total Liabilities | \$ | 3,919,591 | 3,948,652 | 5,037,216 | 5,070,712 | 4,797,774 |
| Net Assets | | | | | | |
| Unrestricted | \$ | 7,192,615 | 7,307,924 | 7,262,728 | 8,255,479 | 8,303,326 |
| Temporarily Restricted | | 4,815,877 | 4,726,496 | 5,369,068 | 7,527,698 | 6,067,470 |
| Permanently Restricted | _ | 3,786,852 | 3,992,807 | 3,661,726 | 3,842,733 | 4,062,435 |
| Total Net Assets | \$ | 15,795,344 | 16,027,227 | 16,293,522 | 19,625,910 | 18,433,23 |
| Total Liabilities and Net Assets | \$ | 19,714,935 | 19,975,879 | 21,330,738 | 24,696,622 | 23,231,005 |

| | | Stateme | nt of Activities | | | |
|--------------------------------------|----|-----------|------------------|-----------|-----------|-----------|
| All Figures in 000's | | 2018 | 2019 | 2020 | 2021 | 2022 |
| Operating Revenue | | | | | | |
| Tuition and Fees | \$ | 1,582,550 | 1,663,558 | 1,731,212 | 1,630,481 | 1,993,923 |
| Less Financial Aid | · | -432,690 | -461,636 | -492,512 | -502,986 | -524,636 |
| Net Tuition and Fees | \$ | 1,149,860 | 1,201,922 | 1,238,700 | 1,127,495 | 1,469,287 |
| Sales and Service of Auxiliaries | \$ | 183,651 | 191,086 | 164,916 | 99,714 | 200,108 |
| Government Grants and Contracts | | 932,464 | 957,447 | 1,018,877 | 1,095,862 | 1,212,635 |
| Private Gifts and Grants | | 309,493 | 265,217 | 280,424 | 280,130 | 362,727 |
| Investment Return | | 437,489 | 451,160 | 429,001 | 381,774 | 407,292 |
| Other Revenues | | 342 | 0 | 0 | 0 | C |
| Sales and Services -Educational | | 228,462 | 239,926 | 221,681 | 210,577 | 216,546 |
| Hospital and Faculty Patient Care | | 1,235,032 | 1,300,863 | 1,306,121 | 1,480,146 | 1,511,543 |
| Assets Released from Restriction | _ | 345,748 | 363,246 | 370,494 | 361,912 | 648,814 |
| Total Operating Revenue | \$ | 4,822,541 | 4,970,867 | 5,030,214 | 5,037,610 | 6,028,952 |
| Operating Expense | | | | | | |
| Instruction and Research | \$ | 2,728,426 | 3,004,625 | 3,118,573 | 3,045,412 | 3,340,449 |
| Academic Support | • | 118,025 | 0 | 0 | 0 | C |
| Student Services | | 0 | 0 | 0 | 0 | C |
| Institutional Support | | 335,312 | 363,613 | 338,154 | 396,911 | 415,895 |
| Facilities Expense | | 0 | 0 | 0 | 0 | C |
| Auxiliary Expense | | 253,906 | 270,481 | 279,388 | 268,157 | 314,039 |
| Sponsored Programs | | 0 | 0 | 0 | 0 | C |
| Other Operating Expense | | 34,384 | 0 | 0 | 0 | C |
| Hospital and Faculty Patient Care | _ | 1,126,846 | 1,178,840 | 1,301,137 | 1,333,846 | 1,407,592 |
| Total Operating Expense | \$ | 4,596,899 | 4,817,559 | 5,037,252 | 5,044,326 | 5,477,975 |
| Chg in Unrestricted Net Assets from | \$ | 225,642 | 153,308 | -7,038 | -6,716 | 550,977 |
| Operating Activities | _ | | | | | |
| Non-Operating Activities | | | | | | |
| Net Excess Investment Return/(Loss) | \$ | 102,570 | 132,718 | 205,610 | 1,096,456 | -488,337 |
| Capital Gifts and Contributions | | 0 | 0 | 0 | 0 | C |
| Assets Released from Restriction | | 0 | 0 | 0 | 0 | C |
| Other Non-Operating Items, Net | | -65,814 | 12,108 | -199,708 | -174,165 | -11,445 |
| Pension & Postretirement Obligations | | 21,852 | 15,467 | -38,894 | 77,176 | -3,348 |
| Change in Value of Derivatives | | 0 | 0 | 0 | 0 | C |
| Extraordinary Gain/(Loss) | _ | 0 | 0 | 0 | 0 | C |
| Total Non-Operating Activities | \$ | 58,608 | 160,293 | -32,992 | 999,467 | -503,130 |
| Change in Unrestricted Net Assets | \$ | 284,250 | 115,309 | -40,030 | 992,751 | 47,847 |

Columbia University Independent Higher Education Institutions

Financial and Operating Ratios

| | Year | | | | | 2022 |
|--|-----------|-----------|-----------|-----------|-----------|-----------------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | DASNY Median |
| Liquidity Ratios | | | | | | |
| Total Cash & Investments to Operating Expenses (x) | 2.7 | 2.8 | 2.6 | 3.3 | 2.7 | 1.5 |
| Total Cash & Investments to Total Debt (x) | 5.5 | 5.8 | 5.0 | 5.6 | 5.5 | 2.0 |
| Expendable Resources to LT Debt (x) | 4.4 | 4.4 | 3.9 | 4.7 | 4.4 | 0.9 |
| Total Cash & Investments per Student (\$) | \$429,039 | \$425,694 | \$449,975 | \$614,348 | \$475,083 | \$61,873 |
| Cash Income (%) | 17.7% | 11.0% | 11.8% | 16.4% | 15.0% | 2.1% |
| Operating Cash Flow to Debt Service (x) | 5.82 | 3.27 | 3.49 | 4.25 | 3.81 | 0.39 |
| Capital Ratios | | | | | | |
| Capital Spending (x) | 1.6 | 1.6 | 1.7 | 1.4 | 1.1 | 1.1 |
| Age of Facility (Yrs) | 11.25 | 11.76 | 12.55 | 13.61 | 13.00 | 14.15 |
| Debt Service to Operating Expenses (%) | 3.0% | 3.4% | 3.4% | 3.9% | 4.4% | 3.8% |
| Annual Debt Service Coverage (x) | 2.7 | 3.0 | 2.0 | 2.1 | 4.3 | 2.3 |
| Total Debt to Total Capitalization (x) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| LT Debt per Student (\$) | \$77,554 | \$73,135 | \$90,169 | \$109,213 | \$86,944 | \$24,381 |
| Productivity and Demand Ratios | | | | | | |
| Primary Matriculation (Yield) (%) | 62.1% | 63.0% | 62.0% | 57.2% | 66.2% | 27.3% |
| Primary Selectivity (Acceptance) (%) | 6.1% | 5.6% | 5.3% | 6.3% | 3.9% | 65.6% |
| Student/Faculty (x) | 6.0 | 6.0 | 5.8 | 5.4 | 6.0 | 10.3 |
| Tuition Discount (%) | 27.3% | 27.7% | 28.4% | 30.8% | 26.3% | 29.8% |
| Educational Core Services (%) | 59.1% | 67.9% | 62.5% | 60.2% | 54.9% | 36.0% |
| Profitability and Operating Ratios | | | | | | |
| Operating Margin (%) | 0.3% | 1.5% | -1.0% | 0.3% | 10.0% | 3.3% |
| Net Income Margin (%) | 1.6% | 0.6% | -1.6% | 20.1% | 1.7% | 3.0% |
| Net Tuition per Student (\$) | \$40,433 | \$41,340 | \$41,915 | \$41,963 | \$46,566 | \$23,159 |
| Return on Net Assets (%) | 6.9% | 1.5% | 1.6% | 18.6% | -6.3% | -2.0% |
| Return on Average Investment Value (%) | 1.5% | 4.0% | 5.1% | 24.6% | -7.0% | -4.2% |
| Net Tuition Dependency (%) | 24.9% | 27.2% | 24.8% | 22.3% | 24.1% | 49.2% |
| Tuition and Auxiliaries (%) | 28.9% | 31.5% | 28.1% | 24.2% | 27.4% | 60.8% |
| Federal Financial Ratio (x) | 3.00 | 2.85 | 2.57 | 3.00 | 2.73 | 2.47 |

A RESOLUTION OF THE DORMITORY AUTHORITY OF THE STATE OF NEW YORK (DASNY) AUTHORIZING STAFF AND BOND COUNSEL TO PROCEED TO TAKE THE NECESSARY ACTION TO PREPARE THE APPROPRIATE DOCUMENTS TO PROVIDE FOR THE FINANCING OF FACILITIES FOR COLUMBIA UNIVERSITY.

Resolved that the staff and bond counsel be authorized to proceed to take the necessary action and prepare the appropriate documents to provide for the financing of facilities for Columbia University, provided, however, that the adoption of this Resolution imposes no duty on the part of DASNY to issue obligations for or on behalf of Columbia University.

This Resolution shall take effect immediately.

Columbia University DASNY Series 2023 - New Money Projects

| | | | _ | | | | Remaining | |
|-----------------|-------------|---|-------------|-----------------|---------------|---------------|---------------|---------------|
| _ | | | | tal Development | | Prior Bond | Trustees | |
| Campus | ARC Project | Project Description | Project Doc | Cost | Trustees DOI | Reimbursement | Authorization | TEFRA Amount* |
| /lanhattanville | CP002496 | Site 0 - Residential Tower | 2020.035 | 184,815,000 | 184,815,000 | - | 184,815,000 | 184,815,000 |
| /lanhattanville | CP002209 | Phase II Foundation & Central Below Grd Facility | 2016.018 | 355,600,000 | 355,600,000 | 276,663,333 | 78,936,667 | 63,000,000 |
| /lanhattanville | CP001051 | Columbia Business School | 2019.010 | 649,900,000 | 649,900,000 | 181,656,664 | 468,243,336 | |
| /lanhattanville | CP002688 | 615 West 131st St Roof & Façade Repair | 2022.012 | 18,660,900 | 18,660,900 | - | 18,660,900 | 18,660,900 |
| /lanhattanville | CP002489 | Nash - Infrastructure | 2021.016 | 19,506,700 | 19,506,700 | - | 19,506,700 | 19,506,70 |
| lanhattanville | CP002382 | CEP - Phase 2 Expansion | 2018.063 | 51,372,000 | 27,872,000 | - | 27,872,000 | 27,872,00 |
| lanhattanville | CP002381 | Open Space Phase II - Large Sq & Woodland Walk | 2020.034 | 47,500,000 | 46,500,000 | 2,133,100 | 44,366,900 | 44,366,90 |
| 1orningside | CP002580 | A&S - Fairchild 700 lvl Bio Lab (Tosches) & Aquatic Fac | 2020.060 | 8,480,000 | 8,480,000 | - | 8,480,000 | 8,480,00 |
| /lorningside | CP002637 | A&S - Mudd 700 lvl Biology Barnhart/Duvall Lab | 2020.046 | 5,105,058 | 5,032,000 | - | 5,032,000 | 5,032,000 |
| /lorningside | CP002768 | A&S - NWC Lab 1100 lvl Physics (McIver) | 2023.025 | 8,826,300 | 8,826,300 | - | 8,826,300 | 8,826,300 |
| 1orningside | CP002786 | A&S - Pupin 10th flr Cyclotron Bldg Lab (Perez) | 2023.016 | 4,789,300 | 4,789,300 | | 4,789,300 | 4,789,30 |
| Aorningside | CP002687 | A&S - Pupin 100/200/1300 Lab Exp (Pasupathy) | 2022.006 | 5,226,645 | 4,977,000 | - | 4,977,000 | 4,977,00 |
| Aorningside | CP002514 | McBain LL11 Repairs | 2021.009 | 5,406,000 | 5,406,000 | - | 5,406,000 | 5,406,00 |
| 1orningside | CP002797 | Broadway Residence Hall Elevator Replacement | 2022.036 | 1,579,400 | 1,579,400 | | 1,579,400 | 1,579,40 |
| 1orningside | CP002636 | East Campus Bldg Modernization | 2020.049 | 3,076,000 | 3,076,000 | - | 3,076,000 | 3,076,00 |
| 1orningside | CP002679 | Wallach Fire Alarm Syst Rplm't & Sprinkler Exp | 2022.024 | 4,643,100 | 4,643,100 | | 4,643,100 | 4,643,10 |
| Aorningside | CP002831 | Law - Greene Infrastructure | 2023.027 | 20,028,100 | 20,028,100 | - | 20,028,100 | 20,028,10 |
| Iorningside | CP002832 | 2900 B'way Basement to 1400 lvl Renovations | 2023.028 | 6,182,400 | 6,182,400 | - | 6,182,400 | 6,182,40 |
| /lorningside | CP002776 | 611 112th St. Site Acquisition | | 28,700,000 | 28,700,000 | - | 28,700,000 | 28,700,00 |
| /lorningside | CP002800 | 611 112th St. site development (design & early const.) | 2023.014 | 6,664,900 | 6,664,900 | - | 6,664,900 | 6,664,90 |
| /lorningside | CP002818 | MS SOGR - Casa Italiana Roof | 2023.006 | 5,166,000 | 5,166,000 | - | 5,166,000 | 5,166,00 |
| /lorningside | CP002610 | Lerner - Roof & Glass Block Architectural Façade Repairs | 2020.050 | 9,200,000 | 9,200,000 | - | 9,200,000 | 9,200,00 |
| 1edical Center | CP002192 | Haven Towers - C of O Requirements | 2017.103 | 37,984,000 | 37,984,000 | - | 37,984,000 | 37,984,00 |
| Aedical Center | CP002785 | VP&S - Hammer 2 Wet Lab Reno for Ophthalmology | 2022.126 | 20,977,506 | 20,977,506 | - | 20,977,506 | 20,977,50 |
| Aedical Center | CP002576 | Black 5th Flr - Biochem & Mol Biophysics | 2022.108 | 7,008,700 | 7,008,700 | - | 7,008,700 | 7,008,70 |
| ledical Center | CP002690 | VP&S 5th & 7th FIrs - Pharmacology Amphitheatre to Lab Conv | 2022.107 | 8,697,000 | 8,697,000 | - | 8,697,000 | 8,697,00 |
| ledical Center | CP002385 | NI Basement - MRI Replacement & Expansion Phase I & II (VP&S) | 2023.111 | 47,077,000 | 37,706,000 | - | 37,706,000 | 37,706,00 |
| ledical Center | CP002724 | VP&S - ARB 1st flr Biobank & Wet Lab | 2023.121 | 16,603,170 | 8,603,170 | - | 8,603,170 | 8,603,17 |
| 1edical Center | CP002613 | VP&S 7th Flr SE - Pharmacology Office Conversion to Lab | 2020.123 | 3,908,000 | 3,908,000 | - | 3,908,000 | 3,908,00 |
| lousing | 0.001010 | IRE 2022 | | 31,500,000 | 28,400,000 | - | 28,400,000 | 28,400,00 |
| - | | IRE 2023 | | 38,850,000 | 35,390,000 | - | 35,390,000 | 35,390,00 |
| lousing | | INE 2025 | | 1,663,033,179 | 1,614,279,476 | 460,453,097 | 1,153,826,379 | 669,646,37 |

63,790,000

669,646,376

Housing

Total

*TEFRA principal amount of bonds. Proceeds can be in excess of principal.

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

OFFICE OF THE SECRETARY

CERTIFICATE OF THE SECRETARY

At a meeting of the Trustees of Columbia University in the City of New York, held on the fourth day of December, two thousand twenty-one, the following actions were taken:

<u>RESOLVED</u>, That the University be and hereby is authorized to purchase 611 West 112th Street, a 36,560 square foot 6-story residential building, at a cost of \$28,700,000 plus related closing expenses and legal fees.

<u>RESOLVED</u>, That in connection therewith the Executive Vice President for University Facilities and Operations and the Vice President for Real Estate be, and each of them hereby is, authorized to execute any and all agreements, instruments, and documents, and take all such other action in the name and on behalf of the University that each or either, with the advice of counsel, may deem necessary or desirable; and be it further

<u>RESOLVED</u>, That this is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$28,700,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

These resolutions remain in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this thirteenth day of December, 2021.

THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

ferme Atau

Jerome Davis Secretary of the University

A TRUE COPY

Columbia University Facilities and Operations Project Document No. 2016.018 Supplement to Project Document No. 2015.016 December 4, 2015 Page 1 of 5

OMBØ2205

(POD 2209 NPP 3155 11/15

Project Document

<u>MANHATTANVILLE IN WEST HARLEM</u> <u>PHASE II FOUNDATION &</u> <u>CENTRAL BELOW GRADE SERVICE FACILITY</u> Sites 6B and 7 Construction Phase – Core and Shell

Statement of Purpose and Need

The Manhattanville campus is planned to be constructed above a multilevel, interconnected underground space referred to as the Central Below Grade Facility. The construction of the Central Below Grade Facility has been established as a pre-requisite for the construction of above grade academic and research facilities for the Manhattanville campus according to the General Project Plan (GPP) and the Restrictive Declaration (RD).

The GPP and the RD identified the reduction of street-level traffic congestion resulting from the below grade receipt and distribution of deliveries made possible by the loading facility within the below grade facility as a key element in the approval of the overall Manhattanville development plan. To facilitate this, the Central Below Grade Facility has been planned to interconnect 125th/129th to the south, 133rd Street to the north, Broadway to the east and 12th Avenue to the west. For Columbia University, this provides a more secure and effective distribution network for campus wide distribution of materials and services.

The construction of the first phase (Phase I) portion of the Central Below Grade Facility was comprised of the slurry walls surrounding development sites 2, 3, 4, 6, 6b, 7 and the open space adjacent to these sites. This first phase also provided for the construction of foundation slabs and below grade infrastructure required to support the Jerome L. Greene Science Center, Central Energy Plant and the Lenfest Center for the Arts.

The second phase (Phase II) portion of the Central Below Grade Facility will be comprised of the foundations and infrastructure required to house the central loading facility, support spaces required to service above grade construction on sites 6B, 7 and supporting program spaces for the Columbia Business School. The construction of the central loading facility during this phase will be an important step toward maintaining compliance with the approved GPP and RD providing a central location for the receipt and distribution of deliveries and services for the Manhattanville campus. The below-grade floor slabs which provide needed program support areas for the Columbia Business School will also function as structural diaphragms providing needed structural bracing for the existing slurry walls around the perimeter of sites 6B and 7 once excavation of the site begins. This second phase will also allow for the extension of the Central Energy Plant infrastructure, utilities, telecommunication equipment and additional support spaces serving above-ground facilities.

Columbia University Facilities and Operations Project Document No. 2016.018 Supplement to Project Document No. 2015.016 December 4, 2015 Page 2 of 5

Following its completion, the new Columbia Business School will serve as an academic anchor for future University development in Manhattanville and will allow much needed space relief on the Morningside Campus. The new location for the Columbia Business School is planned for sites 6B and 7 between 130th and 131st Streets as part of the second phase of the University's proposed campus expansion in Manhattanville in West Harlem.

Project Scope

Previous requests associated with the Phase I Foundation project included design development documentation work for the Phase II Central Below Grade Facility as outlined below:

- Pressure slabs and pilings below sites 6, 6B and 7
- Bridge structures to support a portion of 130th and 131st Streets
- Central Energy Plant infrastructure including utility and telecommunications pathways to support future Phase II above grade construction
- Fit-out of support areas
- Parking facility
- Central loading facility

The previous request for Phase II included the construction documentation of critical core and shell elements (foundations, structural systems and mechanical, electrical and plumbing infrastructure only) of the areas below sites 6B, 7 and the Large Square in preparation for a construction award. This included:

- Pressure slabs, foundation pilings and structural systems below sites 6B, 7 and the Large Square
- A temporary foundation wall between sites 6 and 6B
- Bridge structures to support the eastern portion of 131st Street
- Utility and telecommunication pathways to support future Phase II above grade construction
- Central loading facility and truck ramp
- Coordination with the project teams working to develop the design of the new Columbia Business School on sites 6B and 7

The work that will be undertaken in this phase of the project will include the procurement and construction of core and shell elements (foundations, structural systems and mechanical, electrical and plumbing infrastructure only) of the areas below sites 6B, 7 and the Large Square in Manhattanville.

This funding request does not include further construction associated with the fit-out of future below-grade program areas, components of the Phase II Central Energy Plant or the Phase II Siteworks including the Large Square.

Columbia University Facilities and Operations Project Document No. 2016.018 Supplement to Project Document No. 2015.016 December 4, 2015

Page 3 of 5

Project Budget

| | Previous Request | Current Request | . Total Request |
|---------------------------------|---------------------|--------------------|--------------------|
| Construction | \$500,000 | \$276,705,000 | \$277,205,000 |
| Furniture, Fixtures & Equipment | 0 | 5,425,000 | 5,425,000 |
| A/E Fees and Expenses | 5,850,000 | 10,280,000 | 16,130,000 |
| Contingency | 400,000 | 37,918,000 | 38,318,000 |
| Project Management | 450,000 | 18,072,000 | 18,522,000 |
| Total | \$7,200,000 | \$348,400,000 | \$355,600,000 |

Project Financing

The total request of \$355,600,000 is based on estimates for construction trade costs provided by Lend Lease as well as pending contract awards and will be funded to the extent possible with Central University reserves with the remainder to be funded by University debt to be serviced by the Central University. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$355,600,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Operations and maintenance costs are anticipated to increase by approximately \$1,866,000 per year (in fiscal year 2016 dollars) and will be the responsibility of the Central University. These costs will commence when the below grade facility is placed into service.

Energy Considerations

Any increase in energy consumption costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of the Central University.

Sustainable Design

Sustainable elements of the project will include the recycling of construction materials and debris, the use of recycled content in concrete and steel where appropriate and available. Costs associated with these sustainable components will be negligible.

Columbia University Facilities and Operations Project Document No. 2016.018 Supplement to Project Document No. 2015.016 December 4, 2015 Page 4 of 5

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations. Safety and security costs are estimated to be \$565,000 per year (in fiscal year 2016 dollars) and will commence when the below grade facility is placed into service.

Consideration for the Disabled

This project will be designed to be in compliance with all Americans with Disabilities Act requirements.

Mode of Accomplishment

The firm of Davis Brody Bond, the architect of record, will continue to provide design services. Construction management will be provided by Lend Lease, a construction firm. D&B Environmental Services, Inc., an environmental engineering firm, has been selected to provide environmental borings and testing services to assess future requirements for remediation and abatement of hazardous materials. The Manhattanville Development Group will provide project management services. All vendors are selected in accordance with University procurement procedures.

Certificate of Occupancy

This project will require a Certificate of Occupancy which will be obtained in concert with the Certificate of Occupancy for the Columbia Business School on sites 6B and 7.

Project Schedule

This phase of this project is anticipated to be completed in 2018.

Columbia University Facilities and Operations Project Document No. 2016.018 Supplement to Project Document No. 2015.016 December 4, 2015 Page 5 of 5

Approved by:

DocuSigned by: M Pheenberg.

1/29/2016

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

| DocuSigned by: | : |
|---|----------|
| Nancy E. Johnson | 2/4/2016 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |
| | |

Columbia University Facilities and Operations Project Document No. 2017.103 Supplemental to Project Document 2015.110 Columbia University Medical Center –Project 13981 October 7, 2016 Page 1 of 4

Project Document

<u>COLUMBIA UNIVERSITY MEDICAL CENTER</u> <u>HAVEN AVENUE TOWERS 1, 2 & 3</u> Building Modification Construction Phase

Statement of Purpose and Need

Columbia University Medical Center (CUMC) has identified the need to update the existing Haven Avenue Towers 1, 2 and 3 located at 60-100 Haven Avenue in order to acquire permanent Certificates of Occupancy. Each tower has approximately 30 stories of graduate and medical student apartments, representing 400 residential units and 11 offices in total. These towers serve as the primary residential facilities for students at CUMC.

The Haven Avenue buildings, originally built and owned by the Dormitory Authority of the State of New York in the 1970's and designed to meet the New York State building codes, require modifications to bring the buildings up to current New York City building codes. Compliance issues under the New York City Department of Buildings building code have been identified and require corrective measures to bring the buildings into compliance. Planned modifications include the installation of a state-of-the-art, full-building fire alarm system, below grade sprinklers, apartment improvements, emergency lighting, exit signs and other associated requirements to obtain permanent Certificates of Occupancy.

Project Scope

The current request is for the construction phase of the project for all three buildings. The scope for this phase will include the installation of a fire alarm system, a below grade sprinkler system, emergency signs and exit lights in the hallways and all necessary apartment improvements, including required abatement work. This request also includes all consultant costs for the project.

Project Budget

| | Previous | Current | Total |
|-----------------------|-------------|--------------|--------------|
| | Request | Request | Request |
| Construction | \$885,000 | \$24,901,000 | \$25,786,000 |
| A/E Fees and Expenses | 2,446,000 | 665,000 | 3,111,000 |
| Hazardous Materials | 65,000 | 3,615,000 | 3,680,000 |
| Contingency | 340,000 | 2,917,000 | 3,257,000 |
| Project Management | 224,000 | 1,926,000 | 2,150,000 |
| Total | \$3,960,000 | \$34,024,000 | \$37,984,000 |

Columbia University Facilities and Operations Project Document No. 2017.103 Supplemental to Project Document 2015.110 Columbia University Medical Center –Project 13981 October 7, 2016 Page 2 of 4

Project Financing

The current request of \$34,024,000 is based upon construction bids received. The total request of \$37,984,000 will be funded with \$3,960,000 from Fiscal Years 2015 and 2016 CUMC State of Good Repair annual allocations, \$2,200,000 will be funded by CUMC Housing Reserves residing in CP001789, \$19,824,000 will be funded in debt to be serviced by the Columbia University Medical Center and the balance of \$12,000,000 will be funded by CUMC via a \$2 million annual Housing Subsidy Assessment beginning Fiscal Year 2017 through Fiscal Year 2022. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of the United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$37,984,000 plus cost of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will increase operations and maintenance costs due to the installation of new fire alarm and sprinkler systems and related mechanical and electrical infrastructure. The anticipated increase in maintenance and operations costs will be determined during this phase of the project and will be the responsibility of the Columbia University Medical Center.

Energy Considerations

This project will increase energy costs due to the installation of new fire alarm and sprinkler systems and related mechanical and electrical infrastructure. The anticipated increase in energy consumption costs will be determined during this phase of the project and will be the responsibility of the Columbia University Medical Center.

Sustainable Design

Sustainability design components will be incorporated into the project including LED lighting and low volatile organic compound finishes.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations.

Columbia University Facilities and Operations Project Document No. 2017.103 Supplemental to Project Document 2015.110 Columbia University Medical Center –Project 13981 October 7, 2016 Page 3 of 4

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disability Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate accessibility upgrades to further the goal of a fully accessible campus.

Mode of Accomplishment

The firm of Marin Architects, PC, an architectural firm, will provide design services and code compliance services for the project. The firm of AKF Engineers, LLP, an engineering firm, will provide engineering services. Construction services will be provided by a variety of construction firms to be selected during this phase of the project. Project management will be provided by the Columbia University Medical Center's Capital Project Management Department. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will include the issuance of a new Certificate of Occupancy for the Haven Avenue Towers 1, 2 and 3 at completion.

Project Schedule

The project is anticipated to be completed by December of 2022.

Approved by:

| DocuSigned by: | |
|---|------------|
| Anador Centero | 10/19/2016 |
| BC8569009FD34FF | |
| Amador Centeno, Vice President, Facilities Management and Campus Services | Date |
| | |
| DocuSigned by: | |
| Joanne M. J. Quan | 10/25/2016 |
| Joanne M. J. Quan, Chief Financial Officer, Columbia Medical Center | Date |
| | |
| DocuSigned by: | |
| Nancy te. Johnson | 10/25/2016 |
| E6D80E9FD33C469 | |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |
| | |

Columbia University Facilities and Operations Project Document No. 2018.063 Supplement to Project Document No. 2017.034 June 8, 2018 Page 1 of 4

Project Document

<u>CENTRAL ENERGY PLANT</u> <u>MANHATTANVILLE IN WEST HARLEM</u> <u>PHASE II EXPANSION</u> Construction Phase

Statement of Purpose and Need

The Manhattanville campus includes a Central Energy Plant which provides heating, cooling and emergency electrical service for the new campus. Centralized equipment, when compared with individual building equipment, provides economic benefits in operations and maintenance costs, offers service reliability, is more energy efficient, employs better emission control technologies and is naturally suited for densely packed buildings typical of an urban campus. The Central Energy Plant (CEP) was designed to accommodate an increase in scale, as needed, with the addition of modular equipment to serve campus expansion needs within the area bounded by 125th Street, 132nd Street, Broadway and 12th Avenue.

The elements of the CEP construction during the first phase of the project house equipment and systems to support the heating and cooling needs of the Jerome L. Greene Science Center, Lenfest Center for the Arts and the University Forum. The second phase of the planned expansion of the CEP will serve the heating and cooling needs of the Columbia Business School with some excess capacity that may be utilized to serve future buildings on Site 4 or Site 6 in Manhattanville.

The Central Energy Plant expansion design will feature one chiller to be installed in mechanical space under West 130th Street, three cooling towers installed on the roof of the Jerome L. Greene Science Center, one boiler to be located in the Central Energy Plant mechanical equipment space and the installation of a new emergency generator on the roof of the Studebaker Building. Flexibility of fuel sources will be incorporated into the Central Energy Plant's design.

Project Scope

The previous request provided for the design phase work associated with the Central Energy Plant expansion. Additionally, the previous request provided an allowance for connections and infrastructure between the Central Energy Plant and the new Columbia Business School as well as site utility costs.

The work that will be undertaken in this phase of the project will include procurement and construction of the Central Energy Plant expansion for Phase 2 sites including all related systems required to serve the two Business School facilities. Additionally, this phase will include additional funding for the chilled water and steam distribution loop as well as electrical conduit for permanent power from the CEP to the new Columbia Business School buildings.
Project Budget

| | Previous Request | Current Request | Total Request |
|-----------------------|---------------------|--------------------|------------------|
| Construction | \$14,850,000 | \$26,713,000 | \$41,563,000 |
| A/E Fees and Expenses | 1,361,000 | 1,817,000 | 3,178,000 |
| Contingency | 96,000 | 2,378,000 | 2,474,000 |
| Commissioning | 80,000 | 942,000 | 1,022,000 |
| Project Management | 103,000 | 3,032,000 | 3,135,000 |
| Total | \$16,490,000 | \$34,882,000 | \$51,372,000 |

Project Financing

The current request of \$34,882,000 is based on bids in hand. The total cost of \$51,372,000 will be funded with \$23,500,000 in Columbia Business School gifts with the remaining \$27,872,000 to be funded with Central Reserves, to the extent possible, with the remainder to be funded with debt serviced by the Central budget. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$27,872,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Operations and maintenance costs associated with this facility will continue to be developed during this phase of the project. These costs, once identified, will be the responsibility of the schools that will ultimately receive service from the Central Energy Plant and by the Central University.

Energy Considerations

Energy costs that will be incurred due to the operation of this facility will be determined during this phase of the project. These costs, once identified, will be the responsibility of the schools that will ultimately receive service from the Central Energy Plant and by the Central University.

Sustainable Design

This project will contribute to the University's overall sustainability goals which include application for certification to the U.S. Green Building Council.

Safety and Security

This project will be designed in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this facility will be determined at a subsequent date. These costs, once identified, will be the responsibility of the Central University.

Consideration for the Disabled

This project will have no impact on Americans with Disabilities Act compliance.

Mode of Accomplishment

The engineering firm, Jaros, Baum and Bolles, selected in accordance with University procurement procedures, will provide design and construction administration services. A second engineering firm, RG Vanderweil Engineering, LLP, selected in accordance with University procurement procedures, has provided peer review services during the design phase and will provide commissioning services as the construction work is completed. The Manhattanville Development Group will provide project and construction management for the project.

<u>Certificate of Occupancy</u>

This project will require a certificate of occupancy at project completion.

Project Schedule

This phase of the project is scheduled to be completed by June of 2020.

Approved by:

| David M Grunberg | 7/17/2018 |
|--|--------------------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and | nd Operations Date |
| Docusigned by: Nancy tz. Johnson | 6/14/2018 |
| Section View Drasidant Dudget and Einspeigl Dianning | Doto |

Nancy K. Johnson, Vice President, Budget and Financial Planning

Date

Columbia University Facilities and Operations Project Document No. 2019.010 Supplement to Project Documents No. 2006.046, 2007.021, 2011.018 and 2016.019 October 5, 2018 Page 1 of 4

Project Document

MANHATTANVILLE IN WEST HARLEM <u>NEW COLUMBIA BUSINESS SCHOOL</u> Sites 6B and 7 Supplemental Phase

Statement of Purpose and Need

Following its completion, the new Columbia Business School will serve as an academic anchor for future University development in Manhattanville and will allow much needed space relief on the Morningside Campus. The new location for the Columbia Business School is planned for sites 6B and 7 between 130th and 131st Streets as part of the second phase of the University's proposed campus expansion in Manhattanville in West Harlem.

The Columbia Business School's strategic plan calls for targeted growth in several key areas. The School's current facilities are housed in three primary locations on the Morningside campus: Uris Hall, William and June Warren Hall, Armstrong Hall as well as a satellite location in midtown Manhattan. Opportunities to expand within the confines of the School's current facilities have been exhausted resulting in the need to provide a new location consistent with the School's growth projections.

A functional and space requirements program for the school has been completed. The new Columbia Business School will span two buildings for a total of approximately 492,000 square feet. The program sets the stage for the creation of a place for business education providing a productive, vibrant, "global" society and "global" business network, with seamless communication and cross-cultural awareness, understanding and tolerance. A fundamental premise of the program for the new building is that the best education is best delivered in places that foster community – where small communities of common interests are supported, sustained and embraced, and where broader relationships are nurtured within the school so that the larger community of the Business School, nourished intellectually, socially and collegially, can flourish as a community of the whole.

Project Scope

The previous request included the procurement and construction phases of the new Columbia Business School at Manhattanville based on a construction start in 2016. The current request will fund the additional construction cost escalation resulting from a later than expected construction start and current construction market conditions impacting certain specialty trades. It also funds general liability insurance costs for the University's OCIP (Owner Controlled Insurance Program) that exceeds projections established in 2012 based on Phase 1 OCIP program costs. Finally, this document will fund added scope including New York City Fire Department recently mandated Auxiliary Radio Communications System (ARCS) and fire command station redundancy requirements.

| Project Budget | | | |
|------------------------------------|---------------|---------------|---------------|
| | Previous | Current | Total |
| | Request | Request | Request |
| Construction | \$394,086,450 | \$125,836,530 | \$519,922,980 |
| A/E Fees and Expenses | 45,993,380 | 10,281,634 | 56,275,014 |
| Furniture, Fixtures and Equipment* | 35,822,360 | -18,020,974 | 17,801,386 |
| Commissioning | 2,011,080 | 0 | 2,011,080 |
| Contingency | 84,097,190 | -60,097,190 | 24,000,000 |
| Project Management | 29,889,540 | 0 | 29,889,540 |
| Shared Infrastructure** | 0 | 0 | 0 |
| Total | \$591,900,000 | \$58,000,000 | \$649,900,000 |
| | | | |

* Transfer of costs budgeted in Furniture, Fixtures and Equipment to the construction budget

**Shared Infrastructure costs transferred to the Central Energy Plant expansion project

Project Financing

• • • D

The current request of \$58,000,000 is based on trade awards, updated estimates from the vendor, and escalation. The total request of \$649,900,000 will be funded with \$100,000,000 in Central University reserves, then, to the extent possible, gifts in-hand or pledged, with the remainder to be funded with Columbia Business School operating reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$649,900,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

The Columbia Business School will be responsible for the direct operations and maintenance costs of the new buildings such as custodial, maintenance, and fire safety officers. These costs are estimated to be approximately \$6,534,000 (in fiscal year 2018 dollars) per year, to commence once the buildings have been placed in service. The Central University will be responsible for the operations and maintenance costs of the overall campus, such as supervision/management, overhead, grounds, and waste management. These costs are estimated to be approximately \$2,339,000 (in fiscal year 2018 dollars) per year, to commence once the buildings have been placed in service.

Columbia University Facilities and Operations Project Document No. 2019.010 Supplement to Project Documents No. 2006.046, 2007.021, 2011.018 and 2016.019 October 5, 2018 Page 3 of 4

Energy Considerations

The Columbia Business School will be responsible for the direct energy costs for the new buildings. These costs are estimated to be approximately \$2,814,000 (in fiscal year 2018 dollars) per year, to commence once the buildings have been placed in service.

Sustainable Design

This project will conform to the U.S. Green Building Council's Leadership in Energy and Environmental Design rating system at a silver level.

Safety and Security

This project will be designed in accordance with all University and New York City safety and security regulations. The Columbia Business School will be responsible for safety and security costs for weekends and weekdays beyond the standard 8AM-4PM shift. These costs are estimated to be approximately \$1,158,000 (in fiscal year 2018 dollars) per year, to commence once the buildings have been placed in service. The Central University will be responsible for safety and security costs during the standard 8AM-8PM shift during weekdays. These costs are estimated to be approximately \$2,045,000 (in fiscal year 2018 dollars) per year, to commence once the buildings have been placed in service.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility.

Mode of Accomplishment

The firms of Scofidio + Renfro, the design architect, and FXFOWLE LLP, the architect of record, will provide design services. Turner Construction, a construction management firm will provide construction services through this phase of the project. The Manhattanville Development Group will provide project management services. All vendors will be selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This new facility will require a Certificate of Occupancy at project completion.

Project Schedule

This phase of the project is anticipated to be completed by the end of 2021.

Approved by:

| David Grunburg | 10/9/2018 |
|--|------------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operation | ns Date |
| | |
| Clunn Hubbard | 10/26/2018 |
| Glenn R. Hubbard, Dean, Columbia Business School | Date |
| Docusigned by: Nancy E. Johnson | 12/3/2018 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2020.034 Supplement to Project Documents 2017.033, 2018.028 December 6, 2019 Page 1 of 4

Project Document

PHASE II OPEN SPACE MANHATTANVILLE IN WEST HARLEM LARGE SQUARE Construction Phase

Statement of Purpose and Need

A carefully composed series of plazas, streetscapes and green spaces are planned to be constructed as part of the University's campus expansion in Manhattanville in West Harlem. The unique character of plazas and open spaces provides a rich backdrop to Columbia's Morningside campus and the design and development of the landscapes and open spaces within the Manhattanville campus will provide critical linkages between buildings within the campus and the surrounding community.

Columbia and the City of New York have established a landscape agreement, which requires that no fences, gates or walls be used in the open space plan, thus enhancing the public perception of linkages between the campus and the community. To ensure an integrated overall master plan and design, these open spaces need to be designed in tandem with the buildings that will compose the second phase of the Manhattanville Development.

Project Scope

Previous approvals have provided for the schematic design, design development and construction document phases of the Large Square between sites 6B and 7, which falls between 12th Avenue, Broadway, West 130th Street and West 131st Street. The current request is for the construction of the Large Square, the North/South Passage, the 12th Ave Market Plaza, streetscapes, the interstitial spaces between the level 1 structural slab and the proposed grade, the outside perimeter of the Columbia Business School buildings to the adjacent property line, and the full complement of mechanical, electrical and plumbing systems to support the project.

Project Budget

| | Previous | Current | Total |
|---------------------------------|--------------|--------------|--------------|
| | Request | Request | Request |
| Construction | \$4,200,000 | \$26,940,000 | \$31,140,000 |
| Furniture, Fixtures & Equipment | 0 | 4,100,000 | 4,100,000 |
| A/E Fees and Expenses | 4,350,000 | 610,000 | 4,960,000 |
| Contingency | 850,000 | 3,225,000 | 4,075,000 |
| Commissioning | 15,000 | 310,000 | 325,000 |
| Project Management | 612,000 | 2,288,000 | 2,900,000 |
| Total | \$10,027,000 | \$37,473,000 | \$47,500,000 |

Columbia University Facilities and Operations Project Document No. 2020.034 Supplement to Project Documents 2017.033, 2018.028 December 6, 2019 Page 2 of 4

Project Financing

The current request of \$37,473,000 is based upon proposals provided by design consultants, bids received and historic cost metrics. The total request of \$47,500,000 will be funded, to the extent possible, with Central University Reserves, with the remainder to be funded by University debt. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon total request to date is \$47,500,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Maintenance and operations costs will be determined during this phase of the project. These costs, once identified, will be the responsibility of the Central University.

Energy Considerations

Energy consumption costs will be determined during this phase of the project. These costs, once identified, will be the responsibility of the Central University.

Sustainable Design

This project will comply with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system for Neighborhood Development (LEED-ND), and LEED for Building Design and Construction (LEED BD + C).

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this project will be determined during this phase of the project. These costs, once identified, will be the responsibility of the Central University.

Consideration for the Disabled

This project has been designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate accessibility to further the goal of fully accessible areas throughout the campus.

Columbia University Facilities and Operations Project Document No. 2020.034 Supplement to Project Documents 2017.033, 2018.028 December 6, 2019 Page 3 of 4

Mode of Accomplishment

James Corner Field Operations, a landscape architecture firm, has been selected to provide design services for this project. A general contractor will be selected during this phase to provide construction services for the project. The Columbia University Facilities and Operations Manhattanville Development Group will provide project management services. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not require a certificate of occupancy at project completion.

Project Schedule

This phase of the project is scheduled to be completed by November 2021.

Columbia University Facilities and Operations Project Document No. 2020.034 Supplement to Project Documents 2017.033, 2018.028 December 6, 2019 Page 4 of 4

Approved by:

DocuSigned by: David Greenberg 2/21/2020 AEEBDC0E1B1D4A2.. David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

DocuSigned by:
Nancy & Johnson, Vice President, Budget and Financial Planning12/16/2019Date

Columbia University Facilities and Operations Project Document No. 2020.035 Supplement to Project Documents Nos. 2018.055, 2019.006, 2019.040, 2020.014 December 6, 2019 Page 1 of 4

Project Document

<u>SITE 0 ON WEST 125TH STREET</u> <u>NEW BUILDING – RESIDENTIAL TOWER</u> Design and Construction

Statement of Purpose and Need

Site Zero is a University-owned development site located on the south side of West 125th Street across from the University's Manhattanville Campus. The University plans to redevelop the eastern portion of the property into a 34-story apartment building to house graduate students and faculty members. The gross square footage is approximately 175,000, which includes approximately 10,000 square feet of below grade spaces. Based on preliminary design the new development would yield approximately 30 faculty/scholar apartments and 127 graduate student and post doc beds.

Project Scope

The previous request funded design through the design development phase. The scope of work for this phase will include the continued development of architectural and engineering associated through construction administration. This request will also provide funding for full construction of the residential tower including the excavation and foundation, superstructure, and interior build-out per design.

Project Budget

| | Previous Request | Current Request | Total Request |
|---------------------------------|---------------------|--------------------|---------------|
| Construction | \$373,500 | \$134,393,500 | \$134,767,000 |
| A/E Fees and Expenses | 7,119,000 | 8,355,000 | 15,474,000 |
| Furniture, Fixtures & Equipment | 0 | 6,313,000 | 6,313,000 |
| Contingency | 877,000 | 14,899,000 | 15,776,000 |
| Commissioning | 15,000 | 1,190,000 | 1,205,000 |
| Project Management | 545,000 | 10,735,000 | 11,280,000 |
| Total | \$8,929,500 | \$175,885,500 | \$184,815,000 |

Project Financing

The current request of \$175,885,500 is based on proposals received and estimated costs as of 40% design development. The total request to date of \$184,815,000 will be funded with \$85,500,000 in University Apartment Housing reserves and \$99,315,000 to be funded with debt to be serviced by the University Apartment Housing portfolio. The final allocation of sources of funding will be made prior to the issuance of University debt.

Columbia University Facilities and Operations Project Document No. 2020.035 Supplement to Project Documents Nos. 2018.055, 2019.006, 2019.040, 2020.014 December 6, 2019 Page 2 of 4

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$184,815,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Operations and maintenance costs related to this facility will be determined at the completion of construction documents. These costs, once identified, will be the responsibility of University Apartment Housing.

Energy Considerations

Energy costs related to this facility will be determined at the completion of construction documents. These costs, once identified, will be the responsibility of University Apartment Housing.

Sustainable Design

This project will conform to the U.S. Green Building Council's Leadership in Energy and Environmental Design rating system at a minimum Silver Level. Costs associated with these sustainable components will be estimated during the subsequent phases of the project and included in project budget estimates.

Safety and Security

This project will be designed in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this facility will be determined at the completion of construction documents. These costs, once identified, will be the responsibility of University Apartment Housing.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility.

Mode of Accomplishment

Renzo Piano Building Workshop will provide lead design services and CetraRuddy Architecture D.P.C. will act as architect of record for the project. Pavarini McGovern will serve as construction

Columbia University Facilities and Operations Project Document No. 2020.035 Supplement to Project Documents Nos. 2018.055, 2019.006, 2019.040, 2020.014 December 6, 2019 Page 3 of 4

manager. The Columbia University Facilities and Operations Manhattanville Development Group will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This new facility will require a certificate of occupancy at project completion.

Project Schedule

This phase of the project is scheduled to be completed by the Summer of 2022.

Columbia University Facilities and Operations Project Document No. 2020.035 Supplement to Project Documents Nos. 2018.055, 2019.006, 2019.040, 2020.014 December 6, 2019 Page 4 of 4

Approved by:

 DocuSigned by:
 12/12/2019

 David Greenberg, Executive Vice President, Columbia University Facilities and Operations
 Date

DocuSigned by: Narcy & Johnson E6D80E9FD33C469... 12/16/2019

Nancy K. Johnson, Vice President, Budget and Financial Planning

Date

Project Document

MUDD HALL DEPARTMENT OF BIOLOGICAL SCIENCES BARNHART AND DUVALL LAB RENOVATION 700 Level Construction Phase

Statement of Purpose and Need

The Department of Biological Sciences would like to renovate approximately 4,355 square feet of existing wet lab space in Mudd hall, suites 731, 733, and 735, to accommodate research for two recently recruited "Target of Opportunity" tenure track faculty members, Erin Barnhart, from NYU, and Laura Duvall, from Rockefeller University. Professor Barnhart's research considers the sub cellular organization of neurons in drosophila (fruit flies). Professor Duvall's research focuses on signal pathways associated to feeding and mating in mosquitos.

Project Scope

This request is to fund construction for a shared wet lab to house eight post docs, ten graduate students, and three support staff in addition to professors Duvall and Barnhart. The program includes separate BSL2 facilities for mosquitos and fruit flies as well as a common, central area that incorporates benches, equipment, and other components to serve both Professors' research teams.

The scope of work will include asbestos abatement, demolition, new furniture, new partitions, doors, ceilings, lighting fixtures, electrical and IT distribution, HVAC unit upgrades, plumbing work, provisions for laboratory equipment, sprinklers, a new fire alarms and other life safety systems as required. The project will also require a new independent riser, running from the 700 level of Mudd to an existing generator in the basement of Engineering Terrace. The laboratory equipment fit-out will include computer workstations, dedicated containment facilities for fruit flies and mosquitos, two microscope rooms, a tissue culture room, four environmental rooms and several freezers.

Project Budget

| | Previous | Current | Total |
|-----------------------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$67,000 | \$3,600,000 | \$3,667,000 |
| A/E Fees and Expenses | 326,000 | 0 | 326,000 |
| Furniture, Fixtures and Equipment | 0 | 192,000 | 192,000 |
| Contingency | 36,000 | 379,000 | 415,000 |
| Commissioning | 12,000 | 113,000 | 125,000 |
| Project Management | 29,000 | 278,000 | 307,000 |
| Total | \$470,000 | \$4,562,000 | \$5,032,000 |

Project Financing

The current request of \$4,562,000 is based on the proposed scope of work and benchmarked to recent comparable projects in Fairchild and Mudd hall. The total cost of \$5,032,000 will be funded with debt to be serviced by Arts and Sciences. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$5,032,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Arts and Sciences.

Energy Considerations

Any increase in energy consumption costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Arts and Sciences.

Sustainable Design

Sustainable design components will be developed during this phase of the project.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations. Annual safety and security costs associated with this project will be determined during this phase of the project.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

NK Architects provided design services for the project and a general contractor will be selected during this phase of the project to provide construction services. Columbia University Facilities and Operations Department of Capital Project Management will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

Certificate of Occupancy

This project is not anticipated to affect the certificate of occupancy for Mudd Hall.

Project Schedule

This phase of the project is scheduled to be completed during the fall of 2020.

Approved by:

| David M Grunburg AEEBDC00E1B1D4A2 | /5/2020 |
|---|------------------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations | Date |
| Amy E. Hungerford, Executive Vice President, Dean of the Faculty, Arts and Sciences | /24/2020 Date |
| DocuSigned by: Nancy & Johnson E6D80E9FD33C469 | /3/2020 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2020.049 Supplement to Project Document No. 2020.012 March 3, 2020 Page 1 of 4

Project Document

EAST CAMPUS RESIDENCE HALL CAMPUS SERVICES BUILDING MODERNIZATION Full Building Construction Phase I

Statement of Purpose and Need

Campus Services requests funding for the continued modernization and upgrade of the East Campus Residence Hall, a total area of approximately 352,040 square feet. Campus Services intends to upgrade building infrastructure that has reached the end of its useful life and install modern finishes to meet the portfolio standards. The construction of this project will be phased over multiple summers to be determined in this phase.

Project Scope

Previous projects have addressed numerous system deficiencies within the building. Three separate projects were completed in the summer of 2019 to replace the roof, install new electrical risers and equipment to decommission the gas risers, and to replace the return loop of the chilled water system and install key valves.

The feasibility and design of the full building modernization was funded in the previous phase and included all mechanical and life safety systems, window replacements and interior finish upgrades.

This phase of the project includes the construction costs for the work planned during the summer of 2020. This work includes the replacement of the insulation on the four supply headers of the dual temperature system and the installation of riser isolation valves. A mock-up room will also be completed in summer 2020 providing an example of a finished high-rise room. The project completed during the summer of 2019 revealed mold growth from condensation of the exhaust ducts so this project will evaluate the condition of the exhaust ducts and how to eliminate further condensation issues.

Project Budget

| | Previous | Current | Total |
|-----------------------|-------------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$200,000 | \$1,050,000 | \$1,250,000 |
| A/E Fees and Expenses | 1,230,200 | 0 | 1,230,200 |
| Hazardous Materials | 20,000 | 0 | 20,000 |
| Contingency | 145,000 | 168,000 | 313,000 |
| Commissioning | 48,000 | 27,000 | 75,000 |
| Project Management | 106,800 | 81,000 | 187,800 |
| Total | \$1,750,000 | \$1,326,000 | \$3,076,000 |

Columbia University Facilities and Operations Project Document No. 2020.049 Supplement to Project Document No. 2020.012 March 3, 2020 Page 2 of 4

Project Financing

The current request of \$1,326,000 is based on bids received from general contractors and benchmarking of construction management costs. The total request to date of \$3,076,000 will be funded with Housing Services' operating reserves. The total project cost will be determined after the current phase. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$3,076,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have an impact on operations and maintenance costs to the extent of which will be determined during this phase of the project. These costs once determined will be the responsibility of Campus Services.

Energy Considerations

This project will have an impact on energy consumption costs. The extent of the impact will be determined during this phase of the project. These costs once determined will be the responsibility of Campus Services.

Sustainable Design

This project will have no impact on sustainability. The project will conform to relevant energy and green standard codes.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will have no impact with regard to the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility.

Mode of Accomplishment

The firm of Kouzmanoff Bainton Architects, an architecture firm, will provide design services. A general construction firm will be selected during this phase of the project. Columbia University Facilities and Operations Department of Residential Construction will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for East Campus Residence Hall.

Project Schedule

This phase of the project is scheduled to be completed by September of 2020.

Columbia University Facilities and Operations Project Document No. 2020.049 Supplement to Project Document No. 2020.012 March 3, 2020 Page 4 of 4

Approved by:

| DocuSigned by: David Greenburg AEEBDC001B1D4A2 | 6/5/2020 |
|--|----------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operation | ons Date |
| DocuSigned by: Nancy & Johnson E6D80E9FD33C469 | 4/3/2020 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2020.050 Supplement to Project Document No. 2019.057 March 3, 2020 Page 1 of 3

Project Document

ALFRED LERNER HALL CAMPUS SERVICES ROOF AND GLASS BLOCK BULLNOSE REPLACEMENT Exterior Construction Phase

Statement of Purpose and Need

Alfred Lerner Hall was completed and opened in 1999. The roof system, including waterproofing and drains, and some of the skylights, have reached the end of their useful lives and are leaking at various locations. The glass block architectural facade feature (bullnose) on the Broadway side of the building is also leaking and is showing unsightly rust in several locations.

Project Scope

An earlier funding request provided design funding for an assessment of the seven roofs and their components as well as the glass block bullnose. The assessment determined that all the flat roofing systems including the skylights and the façade bullnose require replacement. The roofing surfaces total approximately 31,000 gross square feet. The glass block bullnose extends approximately 130 linear feet along the Broadway façade. The scope also includes the repair of the building's lightning protection system to restore its original function and purpose.

Project Budget

| | Previous | Current | Total |
|-----------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$20,500 | \$7,000,000 | \$7,020,500 |
| A/E Fees and Expenses | 163,400 | 66,600 | 230,000 |
| Hazardous Materials | 10,000 | 20,000 | 30,000 |
| Contingency | 28,600 | 1,223,400 | 1,252,000 |
| Commissioning | 0 | 106,000 | 106,000 |
| Project Management | 14,500 | 547,000 | 561,500 |
| Total | \$237,000 | \$8,963,000 | \$9,200,000 |

Project Financing

The current request of \$8,963,000 is based on bids received and the total request of \$9,200,000 will be financed internally and supported by the Lerner fee. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$9,200,000 plus costs of issuance and any reserves

Columbia University Facilities and Operations Project Document No. 2020.050 Supplement to Project Document No. 2019.057 March 3, 2020 Page 2 of 3

established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no significant effect on operations and maintenance costs.

Energy Considerations

This project will have no significant effect on energy costs.

Sustainable Design

Sustainable elements of the project will include materials that are low in volatile organic chemicals. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will have no impact on Americans with Disabilities Act compliance.

Mode of Accomplishment

Hoffman Architects, an architecture firm, was selected to provide design and engineering services. A general construction firm will be selected during this phase of the project. Columbia University Facilities and Operations Department of Capital Project Management and Planning will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for Alfred Lerner Hall.

Project Schedule

This phase of the project is scheduled to be completed in March of 2021.

Approved by:

| DocuSigned by: David Greenberg | 6/5/2020 |
|---|----------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operatio | ons Date |
| -Docusigned by: Nancy E. Johnson | 4/3/2020 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2020.060 Supplement Project Documents Nos. 2019.035, 2020.030 June 12, 2020 Page 1 of 4

Project Document

FAIRCHILD HALL AND NORTHWEST CORNER BUILDING ARTS AND SCIENCES AQUATIC RESEARCH FACILITY AND LABORATORY RENOVATION 700 Level Fairchild and 1100 Level Northwest Corner Construction Phase

Statement of Purpose and Need

The Department of Biological Sciences and the Executive Vice President for Research (EVPR) request to construct a new aquatic research facility and renovate existing research laboratory space and shared research equipment space on the 700 level of Fairchild Hall. The aquatic research facility will address the need for a centralized research space on the Morningside Campus that will be overseen by the Institute of Comparative Medicine as part of the Office of the EVPR. The need for an updated aquatic research facility is a logistical and financial decision as determined by the ongoing Animal Care Facility (vivarium) study that is being conducted by the Office of the EVPR. The facility and shared research space align with Arts and Sciences' goal to provide a more collaborative approach to their research.

The aquatic research facility will primarily be used by Professor Kelley and Professor Maria Tosches, a recent recruit from the Max Plank Institute for Brain Research in Frankfurt, Germany. However, the space will serve the needs of the entire Morningside Campus. The laboratory renovation will accommodate the research of Professor Tosches. The shared equipment space will not only provide much needed collaborative space to be shared by the Department of Biological Sciences as a whole, but will also provide cold rooms and equipment to be used by Professors Hunt and Tong who are being displaced by the separate laboratory renovation on the 700 level of Mudd Hall for Professors Barnhart and Duvall.

Until the laboratory and research space has been renovated the Department has identified room 1103C in the Northwest Corner Building as a temporary laboratory space for Maria Tosches to use during the design and construction of the permanent laboratory.

Project Scope

Previous requests provided funding for the design of approximately 7,100 square feet of research space including the aquatic research facility (1,600 square feet), Tosches laboratory (2,600 square feet), and shared equipment space (2,900 square feet). The scope of work consists of the refurbishment of the existing wet laboratory space to accommodate Professor Tosches' research, including a molecular biology and sequencing library and preparation room, a two-photon microscopy room, an electrophysiology room, lab benches, office spaces, and ancillary support elements. Additionally, the new aquatic research facility will accommodate salamanders for Professor Tosches as well as Professor Kelley's frogs and will include a flow-through water treatment system. The balance of work includes a gut renovation of the interior area of the floor,

Columbia University Facilities and Operations Project Document No. 2020.060 Supplement Project Documents Nos. 2019.035, 2020.030 June 12, 2020 Page 2 of 4

including all new mechanical, electrical and plumbing infrastructure, and architectural layouts to accommodate new cold rooms, shared equipment and relocated collateral equipment and shared office space. The renovated space will also include a shared conference room and open pantry to be utilized by the department.

The scope for the temporary laboratory space in the Northwest Corner Building for Professor Tosches includes the purchase of two aquaneering racks, which will be relocated to the permanent laboratory once it is completed.

Project Budget

| | Previous | Current | Total |
|-----------------------------------|-------------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$240,000 | \$5,137,000 | \$5,377,000 |
| A/E Fees and Expenses | 709,000 | 20,000 | 729,000 |
| Furniture, Fixtures and Equipment | 0 | 695,000 | 695,000 |
| Contingency | 78,300 | 879,100 | 957,400 |
| Commissioning | 28,500 | 175,500 | 204,000 |
| Project Management | 64,200 | 453,400 | 517,600 |
| Total | \$1,120,000 | \$7,360,000 | \$8,480,000 |

Project Financing

The current request of \$7,360,000 is based on bids received and the total request of \$8,480,000 will be funded with debt to be serviced by Arts and Sciences. The final allocation of sources of funding will be made prior to the issuance of University debt. The budget is broken down by scope component as follows: the aquatics research facility accounts for approximately \$1,950,000, the shared equipment space accounts for approximately \$3,392,000, and the Tosches laboratory renovation accounts for approximately \$3,138,000 (including approximately \$145,000 for the setup of the temporary laboratory in the Northwest Corner Building).

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$8,480,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will increase operations and maintenance costs for more intensive occupancy by approximately \$45,000 per year and will be the responsibility of Arts and Sciences.

Columbia University Facilities and Operations Project Document No. 2020.060 Supplement Project Documents Nos. 2019.035, 2020.030 June 12, 2020 Page 3 of 4

Energy Considerations

This project will increase energy costs for complexity of new spaces by approximately \$86,800 per year and will be the responsibility of Arts and Sciences.

Sustainable Design

Sustainable design components include the use of low-flow fume hoods and daylight harvesting where applicable.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations.

Yearly safety and security costs associated with this project are \$2,854. These costs will be the responsibility of Arts & Sciences.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility.

Mode of Accomplishment

The architecture firm Perkins + Will was selected to provide design services. A general construction firm will be selected during this phase of the project. Columbia University Facilities and Operations Department of Capital Project Management and Planning will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for Fairchild Hall or the Northwest Corner Building.

Project Schedule

This phase of the project is scheduled to be completed by Fall of 2021.

Approved by:

| David M Grunburg AEEBDC0E1B1D4A2 | 9/30/2020 |
|--|-----------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operation | ns Date |
| DocuSigned by: Amy E. Hungerford A5545672718042D | 9/21/2020 |
| Amy E. Hungerford, Executive Vice President, Dean of the Faculty, Arts and Sciences | Date |
| DocuSigned by: Narry E. Johnson E6D80E9FD33C469 | 9/25/2020 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2020.123 Supplemental to Project Document No. 2019.152 Columbia University Irving Medical Center –Proj-14772 December 6, 2019 Page 1 of 4

Project Document

<u>COLUMBIA UNIVERSITY IRVING MEDICAL CENTER</u> <u>VAGELOS COLLEGE OF PHYSICIANS AND SURGEONS BUILDING</u> <u>DEPARTMENT OF PHARMACOLOGY</u> <u>OFFICE CONVERSION TO WET RESEARCH LABORATORIES</u> 7th Floor Construction Phase

Statement of Purpose and Need

The Department of Pharmacology seeks to renovate approximately 3,174 gross square feet on the 7th floor of the Vagelos College of Physicians and Surgeons Building. The new design will create modern, wet research laboratories and support spaces allowing for greater density of research personnel for the Department of Pharmacology under the leadership of Dr. Corinne T. Abate-Shen. This renovation will meet the department's modern research needs and support future recruitment.

Project Scope

The current funding request is for the construction phase. The proposed scope of work is a gut renovation to convert the existing office space to laboratories for wet research. This project includes the replacement of the 25-year-old air conditioning and exhaust fan units that service the floor. New units of increased capacity will serve this new laboratory and future 7th floor laboratory conversions. Replacement costs have been quoted at \$994,000.

Project Budget

| <u>I Tojeet Duuget</u> | Previous Request | Current Request | Total Request |
|-----------------------------------|---------------------|--------------------|------------------|
| Construction | \$20,000 | \$2,800,000 | \$2,820,000 |
| A/E Fees and Expenses | 200,000 | 25,000 | 225,000 |
| Furniture, Fixtures and Equipment | 0 | 214,000 | 214,000 |
| Hazardous Materials | 9,000 | 42,000 | 51,000 |
| Commissioning | 0 | 40,000 | 40,000 |
| Contingency | 23,000 | 314,000 | 337,000 |
| Project Management | 15,000 | 206,000 | 221,000 |
| Total | \$267,000 | \$3,641,000 | \$3,908,000 |

Project Financing

The current request of \$3,641,000 is based on bids received and the total request of \$3,908,000 will be funded with operating reserves in ARC Project UR006887. The final allocation of sources of funding will be made prior to the issuance of University debt.

Columbia University Facilities and Operations Project Document No. 2020.123 Supplemental to Project Document No. 2019.152 Columbia University Irving Medical Center –Proj-14772 December 6, 2019 Page 2 of 4

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$3,908,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Columbia University Irving Medical Center.

Energy Considerations

Any increase in energy consumption costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Columbia University Irving Medical Center.

Sustainable Design

Sustainable design components will be developed during this phase of the project.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this project will be determined during this phase of the project.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible buildings throughout the campus.

Mode of Accomplishment

MGA Architects and TAS Engineers have been selected to provide architectural and engineering services. Construction services will be selected after evaluating construction bids. Project management will be provided by the Columbia University Irving Medical Center Facilities Capital

Columbia University Facilities and Operations Project Document No. 2020.123 Supplemental to Project Document No. 2019.152 Columbia University Irving Medical Center –Proj-14772 December 6, 2019 Page 3 of 4

Project Management department. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for the Vagelos College of Physicians and Surgeons building.

Project Schedule

This phase of the project is scheduled to be completed by October of 2020.

Approved by:

| DocuSigned by: Andrea H. Choi | 12/10/2019 |
|---|------------|
| Andrea H. Choi, Assistant Vice Dean, Budget and Finance Vagelos College of Physicians and Surgeons | Date |
| DocuSigned by: Amador Centeno BC8569009FD34FF | 12/17/2019 |
| Amador Centeno, Senior Vice President of Facilities Management, Operations and Planning, Vice Dean for Student Services Columbia University Irving Medical Center | Date |
| DocuSigned by: William McLoy 6450E931EEA0487 | 12/10/2019 |
| William P. McKoy, Senior Vice President and Chief Financial Officer Columbia University Irving Medical Center | Date |
| DocuSigned by: Nancy E. Johnson E6DR0E9ED33C469 | 1/16/2020 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning Columbia University | Date |

Columbia University Facilities and Operations Project Document No. 2021.009 Supplement to Project Document No. 2018.068 December 4, 2020 Page 1 of 4

Project Document

MCBAIN RESIDENCE HALL CAMPUS SERVICES LOCAL LAW 11 FAÇADE REPAIRS Full Building Supplemental Construction Phase

Statement of Purpose and Need

New York City Local Law 11 Façade Inspection Safety Program requires building owners to perform an inspection by a licensed professional of the exterior façade of any property higher than six stories every five years, and to repair any non-compliant conditions identified during that inspection prior to the start of the next inspection cycle. In compliance with this law, the University has inspected and is in the process of repairing identified non-compliant conditions a McBain Hall, an 8-story, 92,046 square foot corridor-style, undergraduate residence hall located at 562 West 113th Street in the Morningside Heights Historic District.

Project Scope

The original request funded both design and construction and was benchmarked to projects of similar size and complexity. The scope of work anticipated in the original funding request included targeted pinning and patching of terracotta façade elements, brick replacement, joint-pointing, and lintel and sill replacement at a limited number of the ornate exterior window bays. The original project scope also anticipated the replacement of approximately ten terracotta façade units with cast stone, the final extent of which would have been determined through additional standard close probing on architect-designated areas of the facade by the general contractor. The original project also included the replacement of the public sidewalk and the restoration of the street level areaways adjacent to the building, unrelated to the Local Law 11 requirements.

This supplemental request is for additional and extensive unanticipated repair and replacement work of the structural steel lintels at most of the 42 ornate window bays along the street-facing north and west facades. This scope of work was discovered as part of the standard close probing directed by the architect and performed by the general contractor during the initial construction phase. This work also necessitates the temporary removal of approximately 700 decorative terracotta units that surround the window bays, of which approximately 300 will require in-kind replacement. The in-kind replacement of the terracotta units is a new requirement by the NYC Landmarks Preservation Commission implemented after the project commenced, adding cost, and extending the schedule. Additional redesign fees also are included; however, the sidewalk replacement and areaway restoration are removed.

Project Budget

| | Previous Request | Current Request | Total Request |
|-----------------------|---------------------|--------------------|------------------|
| Construction | \$916,000 | \$3,200,000 | \$4,116,000 |
| A/E Fees and Expenses | 150,000 | 150,000 | 300,000 |
| Contingency | 160,000 | 500,000 | 660,000 |
| Project Management | 80,000 | 250,000 | 330,000 |
| Total | \$1,306,000 | \$4,100,000 | \$5,406,000 |

Project Financing

The current request of \$4,100,000 is based on contractor's estimates and historical benchmarking. The total request of \$5,406,000 will be funded with Campus Services operating reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$5,406,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no effect on operations and maintenance costs.

Energy Considerations

This project will have no significant effect on energy costs.

Sustainable Design

Sustainable elements of the project will include recycling of construction materials and debris. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations.
Consideration for the Disabled

This project will have no impact on Americans with Disabilities Act compliance.

Mode of Accomplishment

The firm of Façade Maintenance Design, an architecture firm, will provide design services. The previous phase of construction was completed by Ideal Roofing and Sheet Metal and a new general contractor will be selected during this phase to complete the remaining work. The Columbia University Facilities and Operations Department of Capital Project Management will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for McBain Residence Hall.

Project Schedule

This phase of the project is scheduled to be completed by the Summer of 2022.

Columbia University Facilities and Operations Project Document No. 2021.009 Supplement to Project Document No. 2018.068 December 4, 2020 Page 4 of 4

Approved by:

DocuSigned by: David M. Grunburg 4/28/2023 E6ED1F01DABE44A....

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

 Docusigned by:
 5/1/2023

 F6D80F9ED33C469
 5/1/2023

Nancy K. Johnson, Vice President, Budget and Financial Planning

Date

Columbia University Facilities and Operations Project Document No. 2021.016 Supplement to Project Document Nos. 2018.049, 2019.009 March 2, 2021 Page 1 of 4

Project Document

NASH BUILDING BUILDING INFRASTRUCTURE UPGRADE Construction Phase

Statement of Purpose and Need

The Nash Building, acquired by Columbia University in 2008, is located at 3280 Broadway in the Manhattanville Development zone. The building was a former automotive factory for Nash Motors Company in the early 1900's. It is approximately 225,000 gross square feet of which approximately 51,400 net square feet is currently unassigned space. Infrastructure upgrades to the building are required to position the building to support the future renovation or fit-out of existing space for academic and administrative uses in currently available space on the 2nd, 3rd, 4th and 5th floors, and potentially on parts of two additional floors currently leased by the University to non-affiliates in the future.

Project Scope

The previous funding approval was for the design of the fire alarm system and other building core infrastructure upgrades. This funding request is for the construction of the new fire alarm system as well as the new core infrastructure work which includes two new elevators, an emergency generator with a fuel-oil tank, associated collateral moves and support related facilities related to the building.

Project Budget

| | Previous | Current | Total |
|-----------------------------------|-----------|--------------|--------------|
| | Request | Request | Request |
| Construction | \$45,000 | \$14,910,000 | \$14,955,000 |
| A/E Fees and Expenses | 714,000 | 270,000 | \$984,000 |
| Furniture, Fixtures and Equipment | 0 | 220,000 | \$220,000 |
| Hazardous Materials | 0 | 65,000 | 65,000 |
| Contingency | 80,100 | 1,530,900 | 1,611,000 |
| Commissioning | 21,000 | 460,000 | 481,000 |
| Project Management | 56,700 | 1,134,000 | 1,190,700 |
| Total | \$916,800 | \$18,589,900 | \$19,506,700 |

Project Financing

The current request of \$18,589,900 is based on bids received from subcontractors and the construction manager. The total request of \$19,506,700 will be funded with \$9,753,350 in Central reserves and \$9,753,350 in debt to be serviced by the Central University. The final allocation of sources of funding will be made prior to the issuance of University debt.

Columbia University Facilities and Operations Project Document No. 2021.016 Supplement to Project Document Nos. 2018.049, 2019.009 March 2, 2021 Page 2 of 4

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$19,506,700 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

The fire alarm upgrade is anticipated to require fire safety supervision due to code regulations. The annual increase to operations and maintenance costs is currently estimated to be \$626,000 and will be the responsibility of the academic programs that ultimately occupy the space.

Energy Considerations

The infrastructure upgrade phase of the project will increase energy costs for power and generator by approximately \$1,000 per year and will be the responsibility of the department upon assignment to the space.

Sustainable Design

Sustainable elements of the project will include energy efficiency lighting in the expanded lobby. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this project is negligible.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

The firm of Urbahn Architects and Vanderweil Engineers provided design services for the project. Skanska USA, a construction management firm, was selected to provide full construction services. Columbia University Facilities and Operations Department of Capital Project Management will Columbia University Facilities and Operations Project Document No. 2021.016 Supplement to Project Document Nos. 2018.049, 2019.009 March 2, 2021 Page 3 of 4

provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will require modifications to the certificate of occupancy of the Nash Building at project completion.

Project Schedule

This phase of the project is scheduled to be completed by May 2022.

Columbia University Facilities and Operations Project Document No. 2021.016 Supplement to Project Document Nos. 2018.049, 2019.009 March 2, 2021 Page 4 of 4

Approved by:

DocuSigned by: David Greenberg AEEBDC0E1B1D4A2... 3/26/2021 David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

| Concusigned by: | |
|---|-----------|
| Nancy E. Johnson E6080E9FD33C469 | 3/22/2021 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2022.006 Supplemental to Project Document No. 2020.044 October 1, 2021 Page 1 of 4

Project Document

<u>PUPIN HALL</u> <u>DEPARTMENT OF PHYSICS</u> <u>PASUPATHY LABORATORY EXPANSION</u> 100, 200 and 1300 Levels Construction Phase

Statement of Purpose and Need

Professor Abhay Pasupathy is an Associate Professor of Physics studying condensed matter and atomic, molecular, and optical physics. Professor Pasupathy's existing laboratories are located on the eastern side of the 100 and 1300 levels of Pupin Hall.

His current and proposed research requires additional space for a new laser system and two experimental stations where the laser will interact with samples in a scanning tunneling microscope (STM). The Department of Physics would like to address these new requirements by expanding his existing laboratory on the 100 level, renovating his office areas on the 1300 level and upgrading a new area on the 200 level of Pupin Hall.

Project Scope

This funding request is for the construction phase of the renovation of 6,000 gross square feet, which includes the expanded laboratory that is 2,500 gross square feet on the 100 and 200 level, and the office space that is 3,500 gross square feet on the 1300 level. The scope of work on the 100 level spans three main areas including the STM experimental chambers, the laboratory corridor, which serves as control space for the experiments inside the chambers, and the laboratory work area. The scope of work on the 200 level includes laboratory accessory use space, and the mechanical and infrastructure support dedicated for the expanded laboratory. The scope of work on the 1300 level office is a cosmetic refresh for rooms 1303 to 1313 which includes new flooring, painting, and a new sink but will not include upgrades to the electrical or other MEP systems.

Project Budget

| | Previous | Current | Total |
|-----------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$50,000 | \$3,460,000 | \$3,510,000 |
| A/E Fees and Expenses | 421,000 | 153,000 | 574,000 |
| Hazardous Materials | 5,000 | 0 | 5,000 |
| Contingency | 42,600 | 419,300 | 461,900 |
| Commissioning | 14,300 | 108,000 | 122,300 |
| Project Management | 34,600 | 269,200 | 303,800 |
| Total | \$567,500 | \$4,409,500 | \$4,977,000 |

Project Financing

The current request of \$4,409,500 is based on bids received. The total request of \$4,977,000 will be funded with debt to be serviced by Arts and Sciences. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$4,977,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will increase operations and maintenance costs by approximately \$71,200 per year due to more intensive occupancy and additional cleaning requirements. These costs will be the responsibility of the Department of Physics. This includes \$40,000 annually for a service agreement with an outside contractor for the critical industrial controls system.

Energy Considerations

This project will increase energy costs for power and chilled water by approximately \$7,000 per year. These costs will be the responsibility of the Department of Physics.

Sustainable Design

Sustainable elements of the project will include energy efficient light fixtures. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this project are negligible.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility.

Mode of Accomplishment

The firm of Shakespeare Gordon Vlado Architects and Legacy Engineers provided the architectural design and engineering professional services. A general construction firm will be selected during the construction phase of the project. Columbia University Facilities and Operations Department of Capital Project Management will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will require modifications to the certificate of occupancy of Pupin Hall at project completion.

Project Schedule

This phase of the project is scheduled to be completed by November of 2022.

Approved by:

| David M Grunburg AEEBDC0E1B1D4A2 | 10/12/2021 |
|---|------------|
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operation | is Date |
| DocuSigned by: Imy E. Hurgerford A5545672718042D Amy E. Hungerford, Executive Vice President, Dean of the Faculty of Arts and Sciences | |
| E6D80E9FD33C469 | 10/11/2021 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2022.012 Supplemental to Project Document No. 2020.052 October 1, 2021 Page 1 of 4

Project Document

STUDEBAKER COLUMBIA UNIVERSITY FACILITIES AND OPERATIONS FACADE REPAIRS AND ROOF REPLACEMENT Building Wide Construction Phase

Statement of Purpose and Need

The exterior envelope of the Studebaker Building, located at 615 West 131st Street, is in need of repair to prevent leak-related water damage and to correct deteriorating conditions on its facade. Since the building was acquired by the University there have only been minor targeted repairs to the façade and roof. Approximately 65,000 square feet of façade across four elevations of the building and the clocktower require repair to correct deterioration. In addition, a full replacement of the 40,000 square foot roof is required to correct ongoing leaks related to equipment installation. The roof is also near the end of its serviceable life.

Project Scope

The current request is to fund the construction phase and the protective sidewalk shedding which is required for the duration of the construction. Façade scope includes terra cotta replacement, parapet reconstruction and other masonry repairs. The roof scope includes installation of a new roofing system with pavers at the main and bulkhead roofs and installation of an access walkway to meet FDNY requirements. The bulkhead roofs and small areas of the facade tested positive for asbestos containing materials and the cost for abatement is also included in this request.

Project Budget

| | Previous | Current | Total |
|-----------------------|-----------|--------------|--------------|
| | Request | Request | Request |
| Construction | \$219,000 | \$14,152,000 | \$14,371,000 |
| A/E Fees and Expenses | 295,000 | 0 | 295,000 |
| Hazardous Materials | 0 | 250,000 | 250,000 |
| Contingency | 30,000 | 2,576,000 | 2,606,000 |
| Project Management | 35,000 | 1,103,900 | 1,138,900 |
| Total | \$579,000 | \$18,081,900 | \$18,660,900 |

Project Financing

The current request of \$18,081,900 is based on bids received. The total request of \$18,660,900 will be funded with Central Reserves to the extent possible with the remainder to be funded with debt to be serviced by the Central Budget. The final allocation of sources of funding will be made prior to the issuance of University debt.

Columbia University Facilities and Operations Project Document No. 2022.012 Supplemental to Project Document No. 2020.052 October 1, 2021 Page 2 of 4

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$18,660,900 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no effect on operations and maintenance costs.

Energy Considerations

This project will have no significant effect on energy costs.

Sustainable Design

Sustainable elements of the project will include recycling of construction materials and debris. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will have no impact on safety and security.

Consideration for the Disabled

This project will have no impact on Americans with Disabilities Act compliance.

Mode of Accomplishment

The firm of Superstructures, an architecture firm, will provide design and engineering services. A general construction firm will be selected during this phase of the project. Columbia University Facilities and Operations Department of Exteriors and Historical Preservation will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

Certificate of Occupancy

This project will not affect the certificate of occupancy for the Studebaker Building.

Columbia University Facilities and Operations Project Document No. 2022.012 Supplemental to Project Document No. 2020.052 October 1, 2021 Page 3 of 4

Project Schedule

This is a multi-year project, to be completed in 2 phases. Phase I: Façade and Abatement work to be completed by December of 2023. Phase II: Roof replacement and FDNY access to be completed by the Fall of 2024.

Columbia University Facilities and Operations Project Document No. 2022.012 Supplemental to Project Document No. 2020.052 October 1, 2021 Page 4 of 4

Approved by:

DocuSigned by: David Grunderg David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date DocuSigned by:

Nancy K. Johnson, Vice President, Budget and Financial Planning

Date

Project Document

<u>WALLACH RESIDENCE HALL</u> <u>HOUSING SERVICES</u> <u>FIRE ALARM SYSTEM REPLACEMENT AND SPRINKLER EXPANSION</u> Full Building Construction Phase

Statement of Purpose and Need

The existing fire alarm system in the Wallach Residence Hall, located at 1116 Amsterdam Avenue, is at the end of its useful life and requires replacement. Campus Services is requesting to replace the fire alarm system and extend the existing sprinkler system within the building.

The residence hall houses 243 undergraduate students and has a total area of 78,464 square feet. The building has two passenger elevators providing access to floors two through nine with lounge and common spaces on all floors.

Project Scope

The project was previously funded for design and the scope currently reflects the regulatory change with the FDNY requiring a multi-phased construction approach through the summers of 2022, 2023, and 2024 as well as asbestos abatement on each floor. The sprinkler relocation on each floor involves asbestos abatement in the plaster that was found on the floor slab above the finished ceiling. The asbestos abatement must be performed in order to file the fire alarm installation with the FDNY. This funding request is for construction and installation of a full fire alarm system, construction to extend the existing sprinkler system to un-sprinklered areas of the building, and all related asbestos abatement work. An allowance for painting corridors and public spaces on floors 1 through 10 is also included in this request.

Project Budget

| | Original | Current | Total |
|---------------------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$20,000 | 3,220,000 | 3,240,000 |
| A/E Fees and Expenses | 432,000 | -87,000 | 345,000 |
| Furniture, Fixtures & Equipment | 0 | 10,000 | 10,000 |
| Hazardous Materials | 20,000 | 80,000 | 100,000 |
| Contingency | 55,600 | 480,000 | 535,600 |
| Commissioning | 17,100 | 112,000 | 129,100 |
| Project Management | 35,400 | 248,000 | 283,400 |
| Total | \$580,100 | \$4,063,000 | \$4,643,100 |

Columbia University Facilities and Operations Project Document 2022.024 Supplement to Project Documents Nos. 2022.009 and 2020.041 March 4, 2022 Page 2 of 4

Project Financing

The current request of \$4,063,000 is based on bids received. The total current request of \$4,643,100 will be funded with Housing Services operating reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$4,643,100 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no effect on operations and maintenance costs.

Energy Considerations

This project will have no impact on energy consumption costs. The project will conform to relevant energy and green standard codes.

Sustainable Design

This project will have no impact on sustainability. The project will conform to relevant energy and green standard codes.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City and FDNY safety and security regulations.

Consideration for the Disabled

This project will be designed in accordance with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility.

Mode of Accomplishment

Lizardos Engineering, an engineering firm, was selected to provide engineering services. A general construction firm will be selected during this phase of the project. Columbia University Facilities and Operations Department of Capital Project Management and Planning will provide project

management services for the project. All vendors are selected in accordance with University procurement procedures.

Certificate of Occupancy

This project will not require modifications to the certificate of occupancy for Wallach Residence Hall.

Project Schedule

The final phase of the project is to be completed by August of 2024.

Date

Approved by:

-DocuSigned by: David M. Grunburg David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations 1/17/2023

Date

-DocuSigned by: Nancy Johnson Nancy K. Johnson, Vice President, Budget and Financial Planning 6/6/2022

Project Document

2900 BROADWAY RESIDENCE HALL CAMPUS SERVICES ELEVATOR MODERNIZATION Construction Phase

Statement of Purpose and Need

The New York City Department of Buildings (DOB) Building Code (Appendix K3) was amended in December of 2013 requiring a secondary emergency brake. Elevator brake systems must be upgraded to comply with the new code by January 1st, 2027. The elevators throughout each campus have also been surveyed creating prioritization and defining additional scope. This request is for the upgrade and general modernization of three passenger elevators located at 2900 Broadway Residence Hall.

Project Scope

This phase of the project is for the construction phase. The scope includes the installation of new controllers and hardware, new elevator management information systems, machine room and secondary lighting, smoke detectors, raceway, wiring, backboxes, digital position indicators, sump pumps, ascending car over-speed, unintended car movement protections, and new intercom systems. The cab interiors will also be remodeled and will include all other necessary required work.

Total

Project Budget

| | Iotai |
|--------------------|-------------|
| | Request |
| Construction | \$1,483,000 |
| Project Management | 96,400 |
| Total | \$1,579,400 |

Project Financing

The total request of \$1,579,400 is based on proposals received and will be funded with Campus Services operating reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$1,579,400 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the

extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no significant effect on operations and maintenance costs.

Energy Considerations

This project will have no significant effect on energy costs.

Sustainable Design

Sustainable elements of the project will include recycling of construction materials and debris. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will have no impact on safety and security. This project will be designed and constructed in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

Construction management will be provided by Nouveau Elevator. Columbia University Facilities and Operations Engineering group will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for 2900 Broadway Residence Hall.

Project Schedule

This phase of the project is scheduled to be completed by August of 2022.

Approved by:

DocuSigned by: David Grunburg 6/2/2022

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

| DocuSigned by: | |
|---|----------|
| Nancy Johnson | 6/6/2022 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Columbia University Facilities and Operations Project Document No. 2022.107 Supplemental Project Document to No. 2020.134 Columbia University Irving Medical Center –Proj-14700 December 3, 2021 Page 1 of 4

Project Document

<u>COLUMBIA UNIVERSITY IRVING MEDICAL CENTER</u> <u>VAGELOS COLLEGE OF PHYSICIAN AND SURGEONS BUILDING</u> <u>THE DEPARTMENT OF PHARMACOLOGY</u> <u>AMPHITHEATER CONVERSION TO WET RESEARCH LABORATORIES</u> 5th and 7th Floors Construction Phase

Statement of Purpose and Need

The Vagelos College of Physicians and Surgeons and the Department of Pharmacology seek to gut renovate approximately 6,644 gross square feet of amphitheater, offices, corridors, and restrooms on the 5th and 7th floor of the Vagelos College of Physicians and Surgeons Building to convert an existing amphitheater into a new, state-of-the-art wet laboratory research facility to accommodate the relocation of the Department of Pharmacology Chair Dr. Abate-Shen from Irving Cancer Research Center (ICRC) 3rd floor.

Project Scope

The construction phase scope of the work will include construction administration professional services, asbestos abatement, heavy demolition, structural steel framing, metal decking, concrete slab flooring, and general construction services for the new wet research laboratory fit-outs on the 5th and 7th floors including a new microscopy room, a mass spectrometer room, offices and other laboratory support spaces, renovations to existing 7th floor restrooms and public corridors. The project will involve the exterior window replacement, a new ventilation system including horizontal duct work, variable air volume (VAV) boxes, supplemental air handling units, new temperature controls, fume hoods, horizontal ducts, new plumbing and sprinklers, installation of new casework, network infrastructure and cabling, and fire alarm and security systems.

Project Budget

| | Previous | Current | Total |
|-----------------------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$20,000 | \$5,830,000 | \$5,850,000 |
| A/E Fees and Expenses | 414,000 | 166,000 | 580,000 |
| Furniture, Fixtures and Equipment | 0 | 758,500 | 758,500 |
| Hazardous Materials | 0 | 225,000 | 225,000 |
| Contingency | 43,400 | 703,000 | 746,400 |
| Commissioning | 40,000 | 5,000 | 45,000 |
| Project Management | 31,000 | 461,100 | 492,100 |
| Total | \$548,400 | \$8,148,600 | \$8,697,000 |

Columbia University Facilities and Operations Project Document No. 2022.107 Supplemental Project Document to No. 2020.134 Columbia University Irving Medical Center –Proj-14700 December 3, 2021 Page 2 of 4

Project Financing

The current request of \$8,148,600 is based on bids and the total request of \$8,697,000 will be funded with debt to be serviced by the Vagelos College of Physicians and Surgeons. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$8,697,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Columbia University Irving Medical Center.

Energy Considerations

Any increase in energy consumption costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of the Columbia University Irving Medical Center.

Sustainable Design

Sustainability considerations will be incorporated into the project including LED lighting, a new building management system, controlled HVAC system, lighting sensors and timers, low VOC finishes, the incorporation of furniture and finishes containing recycled material content and recycling programs for staff waste.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations. Yearly safety and security costs associated with this project will be determined after this phase of the project.

Columbia University Facilities and Operations Project Document No. 2022.107 Supplemental Project Document to No. 2020.134 Columbia University Irving Medical Center –Proj-14700 December 3, 2021 Page 3 of 4

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible buildings throughout the campus.

Mode of Accomplishment

HLW Architects, AKF Engineers, O'Donnell & Naccarato Structural Engineers have been selected to provide architectural and engineering services. Construction services will be provided by a construction firm to be selected during this phase of the project. Project management will be provided by the Columbia University Irving Medical Center Facilities Capital Project Management department. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for the Vagelos College of Physicians and Surgeons Building.

Project Schedule

This project is scheduled to be completed in March of 2023.

Columbia University Facilities and Operations Project Document No. 2022.107 Supplemental Project Document to No. 2020.134 Columbia University Irving Medical Center –Proj-14700 December 3, 2021 Page 4 of 4

Approved by:

| DocuSigned by: Kuli Odel-Kamadan | 4/27/2023 |
|--|-----------|
| Rudi Odeh-Ramadan, Vice Dean, Finance and Administration Vagelos College of Physicians and Surgeons | Date |
| Patrick Burke 128DC0B08E884B6 | 4/27/2023 |
| Patrick Burke, Vice President, Facilities Management, Operations & Planning Columbia University Irving Medical Center | Date |
| DocuSigned by: | 4/27/2023 |
| William P. McKoy, Senior Vice President and Chief Financial Officer Columbia University Irving Medical Center | Date |
| Docusigned by: Nancy E. Johnson | 5/1/2023 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning Columbia University | Date |

Columbia University Facilities & Operations Project Document No. 2022.108 Supplemental to Project Documents No. 2019.141 Columbia University Irving Medical Center –Proj-14611 December 3, 2021 Page 1 of 4

Project Document

<u>COLUMBIA UNIVERSITY IRVING MEDICAL CENTER</u> <u>WILLIAM BLACK MEDICAL RESEARCH BUILDING</u> <u>THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOPHYSICS</u> <u>GUT RENOVATION FOR WET RESEARCH LABORATORIES</u> 5th Floor Construction Phase

Statement of Purpose and Need

The Vagelos College of Physicians and Surgeons and the Department of Biochemistry and Molecular Biophysics seek to gut renovate approximately 7,684 gross square feet of laboratory spaces, offices, corridors, and restrooms on the 5th floor of the William Black Medical Research Building. This project is a gut renovation that will replace outdated laboratories, support spaces and infrastructure into a new, state-of-the-art laboratory facility to meet the modern research needs of the department and to expand and accommodate new recruits.

Project Scope

The construction phase scope of work will include professional services for construction administration, collateral moves, asbestos abatement, heavy demolition, full construction of new wet research laboratories, tissue culture rooms, equipment rooms, autoclave room and other laboratory support spaces, offices, restrooms and public corridors, replacement of exterior windows, installation of new laboratory casework, all new finishes, replacement of the existing ventilation system including horizontal duct work, variable air volume boxes, supplemental air handling units, new controls, new electrical, new lighting, new fire alarm system, new plumbing, new sprinklers, furniture, and network infrastructure and cabling.

Project Budget

| | Previous | Current | Total |
|-----------------------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$71,500 | \$4,736,400 | \$4,807,900 |
| A/E Fees and Expenses | 341,000 | 142,000 | 483,000 |
| Furniture, Fixtures and Equipment | 35,000 | 381,300 | 416,300 |
| Hazardous Materials | 15,000 | 242,500 | 257,500 |
| Contingency | 51,500 | 550,000 | 601,500 |
| Commissioning | 45,500 | 0 | 45,500 |
| Project Management | 33,500 | 363,500 | 397,000 |
| Total | \$593,000 | \$6,415,700 | \$7,008,700 |

Columbia University Facilities & Operations Project Document No. 2022.108 Supplemental to Project Documents No. 2019.141 Columbia University Irving Medical Center –Proj-14611 December 3, 2021 Page 2 of 4

Project Financing

The current request of \$6,415,700 is based on bids and the total request of \$7,008,700 will be funded with debt to be serviced by the Vagelos College of Physicians and Surgeons. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$7,008,700 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be the responsibility of Columbia University Irving Medical Center.

Energy Considerations

Any increase in energy consumption costs will be the responsibility of Columbia University Irving Medical Center.

Sustainable Design

Sustainability considerations will be incorporated into the project including LED lighting, a new building management system-controlled HVAC system, lighting sensors and timers, low VOC finishes, the incorporation of furniture and finishes containing recycled material content and recycling programs for staff waste.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible buildings throughout the campus.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations.

Columbia University Facilities & Operations Project Document No. 2022.108 Supplemental to Project Documents No. 2019.141 Columbia University Irving Medical Center –Proj-14611 December 3, 2021 Page 3 of 4

Mode of Accomplishment

MGA Architects and TAS Engineers have been selected to provide architectural and engineering services. Construction services will be provided by a construction firm to be selected during this phase of the project. Project management will be provided by the Columbia University Irving Medical Center Facilities Capital Project Management department. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for the William Black Medical Research Building.

Project Schedule

This phase of the project is anticipated to be completed in December of 2022.

Approved by:

| BocuSigned by: Rudi Odul-Kamadan | 4/27/2023 |
|---|-----------|
| Rudi Odeh-Ramadan, Vice Dean, Finance and Administration Vagelos College of Physicians and Surgeons | Date |
| Patrick Burke | 4/27/2023 |
| Patrick Burke, Vice President, Facilities Management, Operations & Planning Columbia University Irving Medical Center | Date |
| DocuSigned by: | 4/27/2023 |
| William P. McKoy, Senior Vice President and Chief Financial Officer Columbia University Irving Medical Center | Date |
| DocuSigned by: Narry E. Johnson | 5/1/2023 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning Columbia University | Date |

Project Document

<u>COLUMBIA UNIVERSITY IRVING MEDICAL CENTER</u> <u>HAMMER HEALTH SCIENCES BUILDING</u> <u>DEPARTMENT OF OPHTHALMOLOGY</u> <u>GUT RENOVATION FOR WET RESEARCH LABORATORIES</u> 2nd, 7th, and 8th Floors Construction Phase

Statement of Purpose and Need

The Vagelos College of Physicians and Surgeons and the Department of Ophthalmology seek to gut renovate 12,808 gross square feet of offices, classrooms, and IT support spaces on the 2nd, 7th, and 8th floors of the Hammer Health Sciences Building to construct new state-of-the-art, open plan, wet research laboratories, offices, and support spaces to accommodate the relocation of approximately 14 principle investigators from the Edward S. Harkness Eye Institute and Research Annex buildings at the request of New York Presbyterian Hospital.

Project Scope

The project scope will include architectural and engineering services during the construction administration phase, commissioning services, asbestos abatement, and gut demolition. New construction will include but not be limited to: partitions, ceilings, finishes, casework, furniture, signage, network/communications infrastructure, electrical infrastructure including normal power and emergency power, lighting, plumbing infrastructure for vacuum, compressed air, reverse osmosis water system, fire protection, security system, mechanical ventilation system with horizontal ductwork, supplemental cooling system, fume hood risers and fans, temperature controls, and renovation of shared glass wash facility on the 7th floor. This project also includes a major infrastructure upgrade to the 8th floor mechanical equipment room and the replacement of the main air handling unit (AHU-2) that serves the entire 1st and 2nd floors as well as the installation of a new heat recovery exhaust fan system to convert the existing return ventilation system to 100% outside air.

Project Budget

| <u></u> | Previous Request | Current Request | Total Request |
|-----------------------------------|---------------------|--------------------|------------------|
| Construction | \$30,000 | \$15,731,000 | \$15,761,000 |
| A/E Fees and Expenses | 525,000 | 345,000 | 870,000 |
| Furniture, Fixtures and Equipment | 10,000 | 1,043,000 | 1,053,000 |
| Hazardous Materials | 15,000 | 233,000 | 248,000 |
| Contingency | 64,000 | 1,714,100 | 1,778,100 |
| Commissioning | 60,000 | 20,000 | 80,000 |
| Project Management | 42,240 | 1,145,166 | 1,187,406 |
| Total | \$746,240 | \$20,231,266 | \$20,977,506 |

Project Financing

The current request of \$20,231,266 is based on construction estimates received. The total request of \$20,977,506 will be funded with \$20,653,700 in debt to be serviced by the Vagelos College of Physicians and Surgeons and \$323,806 of operating reserves in Project UR006887. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$20,977,506 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Columbia University Irving Medical Center.

Energy Considerations

Any increase in energy consumption costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Columbia University Irving Medical Center

Columbia University Facilities & Operations Project Document No. 2022.126 Supplement to Project Document Nos. 2022.123, 2021.123 Columbia University Irving Medical Center –Proj-15176 June 3, 2022 Page 3 of 4

Sustainable Design

Sustainability considerations will be incorporated into the project including LED lighting, a new building management system-controlled HVAC system, new air handling unit and exhaust fan with heat recovery, new lighting sensors and timers, low VOC finishes, the incorporation of furniture and finishes containing recycled material content, and recycling programs for staff waste.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible buildings throughout the campus.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations.

Mode of Accomplishment

The firms of MGA Architects and RG Vanderweil have been selected to provide architectural and engineering services. Construction services will be provided by a construction firm to be selected during this phase of the project. Project management will be provided by the Columbia University Irving Medical Center Facilities Capital Project Management department. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will require modifications to the certificate of occupancy for the Hammer Health Sciences Building at project completion.

Project Schedule

This phase of the project is anticipated to be completed in September of 2023.

Columbia University Facilities & Operations Project Document No. 2022.126 Supplement to Project Document Nos. 2022.123, 2021.123 Columbia University Irving Medical Center –Proj-15176 June 3, 2022 Page 4 of 4

| Approved by: | |
|---|-----------|
| | 6/10/2022 |
| Rudi Odeh-Ramadan, Vice Dean, Finance and Administration | Date |
| Vagelos College of Physicians and Surgeons | |
| DocuSigned by: | |
| Amador Centeno | 6/10/2022 |
| Amador Centeno, Senior Vice President of Facilities Management | Date |
| Operations and Planning, Vice Dean for Student Services | |
| Columbia University Irving Medical Center | |
| DocuSigned by: | |
| William P. McKoy | 6/14/2022 |
| William P. McKoy, Senior Vice President and Chief Financial Officer | Date |
| Columbia University Irving Medical Center | |
| DocuSigned by: | |
| Nancy Johnson | 8/22/2022 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |

Project Document

<u>CASA ITALIANA (1161 AMSTERDAM AVENUE)</u> <u>COLUMBIA UNIVERSITY FACILITIES AND OPERATIONS</u> <u>ROOF REPLACEMENT AND FACADE REPAIRS</u> Entire Building Construction Phase

Statement of Purpose and Need

The existing tile roofing system of the Casa Italiana Building, located at 1161 Amsterdam Avenue, is at the end of its serviceable life and is in need of replacement to prevent leak-related water damage and to repair conditions on its facades. After a thorough close inspection of the exterior envelope of the facility by an architect in 2021, it was determined that a full replacement of the historic roof along with minor repairs to the façade would be required to fully protect the building.

Project Scope

The previous request was for site survey, site investigation, and report preparation. The current request is to fund the full replacement of 4,000 square feet of the original terra cotta roof and 1,200 square feet of the existing copper seam roof in addition to minor façade repairs to the limestone, brick, and terra cotta features at all four elevations. The repair and replacement work also will require the installation of protective sidewalk shedding and pipe scaffolding for the duration of the construction. The roof replacement will include the main terra cotta tile and copper batten seam roof along with the small flat setback roof at the north elevation. Façade scope includes terra cotta and limestone patching, brick replacement, and repointing.

Project Budget

| | Previous | Current | Total |
|-----------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$94,000 | \$4,021,600 | \$4,115,600 |
| A/E Fees and Expenses | 50,000 | 200,000 | 250,000 |
| Contingency | 12,000 | 473,100 | 485,100 |
| Project Management | 10,000 | 305,300 | 315,300 |
| Total | \$166,000 | \$5,000,000 | \$5,166,000 |

Project Financing

The current request of \$5,000,000 is based on bids and the total request of \$5,166,000 will be funded with reserves to the extent possible, with the remainder to be funded with debt. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$5,166,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no effect on operations and maintenance costs.

Energy Considerations

This project will have no significant effect on energy costs.

Sustainable Design

Sustainable elements of the project will include recycling of construction materials and debris. Costs associated with these sustainable components will be negligible.

Safety and Security

This project will have no impact on safety and security.

Consideration for the Disabled

This project will have no impact on Americans with Disabilities Act compliance.

Mode of Accomplishment

The firm of Walter B. Melvin Architects will provide design services. A general construction firm will be selected during this phase of the project. Columbia University Facilities and Operations Exteriors and Historical Preservation will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for Casa Italiana (1161 Amsterdam Avenue).

Project Schedule

This phase of the project is scheduled to be completed in the Spring of 2024.

Approved by:

-DocuSigned by: David M. Greenberg 1/17/2023

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

DocuSigned by: Nancy K. Johnson, Vice President, Budget and Financial Planning 10/26/2022 Date
Columbia University Facilities and Operations Project Document 2023.014 Supplement to Project Document No. 2022.038 December 2, 2022 Page 1 of 4

Project Document

<u>611 WEST 112TH STREET</u> <u>CAMPUS SERVICES</u> <u>BUILDING GUT RENOVATION</u> Entire Building Design and Early Construction Phase

Statement of Purpose and Need

The University acquired 611 West 112th Street, a 36,560 square foot, 6-story residential building constructed in 1904, in February of 2022. The site has a land area of 8,831 square feet and 87.5 feet of frontage along the north side of West 112th Street. The building was formerly operated as single room occupancy housing and has been vacant for more than 12 years. The building, located in an R8 zoning district, is landmarked as part of the Morningside Heights Historic District, and cannot be demolished for new development nor can the envelope of the building be increased with additional development rights. The building presents an opportunity to reconfigure the interior layout specifically for use as student housing.

Project Scope

The building has been poorly maintained and rain has caused the roof to cave in and seep through all the floors to the basement, thus affecting the structural stability of all floor slabs. Ceilings, floors, partitions, finishes, electrical and plumbing services, outlets, and fixtures have been completely removed between the 2nd and 6th floors in the building. Due to the current condition, the building will require a full gut renovation.

This phase of the project is for full design services through construction administration, and for early, make-ready packages. Make-ready work will include site safety, temporary access and logistics, selective demolition, structural steel framing (stabilization), roofing and abatement. The project will need to proceed on a multi-phase approach, with design proceeding while building stabilization progresses providing safe access to all areas of the building.

Project Budget

| | Previous | Current | Total |
|-----------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$100,000 | \$2,000,000 | \$2,100,000 |
| A/E Fees and Expenses | 560,000 | 2,500,000 | 3,060,000 |
| Hazardous Materials | 0 | 500,000 | 500,000 |
| Contingency | 66,000 | 500,000 | 566,000 |
| Commissioning | 22,000 | 0 | 22,000 |
| Project Management | 48,600 | 368,300 | 416,900 |
| Total | \$796,600 | \$5,868,300 | \$6,664,900 |

Project Financing

The current request of \$5,868,300 is based on the average fee from short listed architectural and engineering firms and estimates. The current total request of \$6,664,900 will be funded with \$796,600 in Campus Services operating reserves and \$5,868,300 in debt to be serviced by Campus Services. The total project cost will be determined after the completion of design. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$6,664,900 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Campus Services.

Energy Considerations

Any increase in energy consumption costs will be determined during this phase of the project. These costs, once determined, will be the responsibility of Campus Services.

Sustainable Design

Sustainable design components will be developed during this phase of the project.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations.

Yearly safety and security costs associated with this project will be determined after this phase of the project.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include

the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

An architectural firm will be selected during this phase of the project to provide design services. A construction management firm will be selected during this phase of the project. Columbia University Facilities and Operations Manhattanville Development Group will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will require modifications to the certificate of occupancy for 611 West 112th Street at project completion.

Project Schedule

This phase of the project is scheduled to be completed by August 2023.

Columbia University Facilities and Operations Project Document 2023.014 Supplement to Project Document No. 2022.038 December 2, 2022 Page 4 of 4

Approved by:

DocuSigned by: David M. Grunhurg David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date DocuSigned by: Narry Johnson ENDROGEDING (ARB) 1/30/2023

Nancy K. Johnson, Vice President, Budget and Financial Planning

Date

Columbia University Facilities and Operations Project Document No. 2023.016 Supplement to Project Document No. 2022.022 December 2, 2022 Page 1 of 4

Project Document

<u>PUPIN HALL AND NEVIS CYCLOTRON BUILDING</u> <u>DEPARTMENT OF PHYSICS</u> <u>PEREZ LABORATORY RENOVATION</u> Pupin 10th Floor and Nevis Cyclotron Building 1st Floor Construction Phase

Statement of Purpose and Need

The purpose of this project is to create a laboratory for a new Department of Physics hire, Kerstin Perez. The lab will be divided into two locations. The first being the renovation of lab space on the 10th floor of Pupin Hall and the second being a new clean room and equipment space at the Nevis Cyclotron building. The laboratory will be divided into the following two locations: 3,106 square feet of laboratory space on the 10th floor of Pupin Hall and 700 square feet of clean room and equipment space at the Nevis Cyclotron building.

Project Scope

This request is to fund the construction phase of the project. The new laboratory space will be in rooms 1030 and 1031 in Pupin Hall, which will be used for general laboratory functions including work with sensitive optic and silicon detectors. The spaces require cosmetic and infrastructure upgrades throughout including upgrading the HVAC system, upgrading the humidity control with a new dehumidifier, and constructing a tight enclosure along the internal envelope in room 1031. Room 1030 will be equipped with a new fume hood that requires new ventilation and new fire rated walls designed to maintain the existing FDNY chemical storage permit. The upgrades in room 1030 will also include a new HVAC system, plumbing work, additional power for the ovens, new lab equipment, and new exhausts ducts for the ovens and fume hood. The exhaust system will run from the 10th floor to the 14th floor and requires structural work. The ceiling on the 14th floor will be impacted by duct work and the exhaust fans will be placed on the roof. A new fire alarm and sprinkler systems will be built on the 10th floor labs and corridors to comply with NYC Department of Buildings code. New flooring, painting and furniture will be provided.

In the Nevis Cyclotron Building room 101B, the existing clean room will be demolished and a new clean room will be built to accommodate the existing equipment. The Nevis portion of the project is approximately 38% of the total project cost.

Project Budget

| | Previous | Current | Total |
|------------------------------------|-----------|-------------|-------------|
| | Request | Request | Request |
| Construction | \$98,000 | \$3,412,000 | \$3,510,000 |
| A/E Fees and Expenses | 411,000 | 0 | 411,000 |
| Furniture, Fixtures, and Equipment | 0 | 60,000 | 60,000 |
| Contingency | 51,000 | 346,300 | 397,300 |
| Commissioning | 18,000 | 101,000 | 119,000 |
| Project Management | 38,000 | 254,000 | 292,000 |
| Total | \$616,000 | \$4,173,300 | \$4,789,300 |

Project Financing

The current request of \$4,173,300 is based on bids received and the total request of \$4,789,300 will be funded with debt to be serviced by Arts and Sciences. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$4,789,300 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any increase in maintenance and operations costs will be determined during this phase of the project. These costs once determined will be the responsibility of Arts and Sciences.

Energy Considerations

Any increase in energy consumption costs will be the responsibility of Arts and Sciences.

Sustainable Design

Sustainable design components were developed during the design phase of the project including the use of low-flow fume hoods and daylight harvesting where applicable.

Safety and Security

This project has been designed, and it will be constructed in accordance with all University and New York City safety and security regulations. Annual safety and security costs associated with this project will be determined during this phase of the project. These costs will be the responsibility of Arts and Sciences.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

Spacesmith will provide architectural and engineering services for this project. A general contracting firm will be selected during this phase of the project to provide construction services. Columbia University Facilities and Operations Department of Capital Project Management and Planning will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project is not anticipated to affect the certificates of occupancy for Pupin Hall or Nevis Cyclotron Building.

Project Schedule

This phase of the project is scheduled to be completed by August of 2023.

Approved by:

| DocuSigned by: | |
|---|-----------|
| David M. Greenberg | 12/5/2022 |
| David M. Greenberg, Executive Vice President, Columbia University Facilities and Operat | ions Date |
| | |
| | |
| Docusigned by: lmy Hungerford | 12/5/2022 |
| Amy Hungerford, Executive Vice President, Dean of the Faculty, Arts and Sciences | Date |
| | |
| DocuSigned by: | |
| Nancy Johnson | 1/30/2023 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |
| | |

Columbia University Facilities and Operations Project Document No. 2023.025 Supplement to Project Document No. 2022.008 February 27, 2033 Page 1 of 4

Project Document

NORTHWEST CORNER BUILDING DEPARTMENT OF PHYSICS JAMES MCIVER LABORATORY RENOVATION 1100 Level Construction Phase

Statement of Purpose and Need

The Department of Physics requires a complete renovation of approximately 2,670 square feet of an existing laboratory suite on the 1100 level of the Northwest Corner Building for a new faculty member, James McIver. The McIver Laboratory uses ultrafast optoelectronic techniques to study how charge and spin are transported in quantum materials at terahertz frequencies and on ultrafast timescales.

Project Scope

The laboratory will be in suite 1103 in the Northwest Corner Building, located between the Dean Lab and Basov Labs. The laboratory will incorporate spaces labeled 1103, 1103A, 1103B, 1103C, and 1104D. This project is a gut renovation of the existing space, with existing perimeter walls and ceiling grid to remain as feasible.

The research involves the fabrication of electrical circuits, experimentation involving femtosecond lasers, and atomic force microscopy (AFM). The laboratory is comprised of two distinct areas, the sample preparation laboratory, and the laser laboratory. The laboratory space requirements include temperature stability of +/-0.5 C at the optics tables and +/-1C elsewhere, humidity stability of +5% -10%, and a vibration requirement of VC-C. Due to the temperature control requirements, the laboratory is considered a Critical Environment, as defined by Columbia's Facility Design Requirements, the HVAC controls system shall have industrial grade components and a SCADA based control system, similar to the Will, Basov, Delor, and Pasupathy laboratories.

The scope of construction will include selective demolition, new partitions, doors, ceilings, lighting fixtures, electrical and IT distribution, HVAC system modifications, plumbing work, A/V, provisions for laboratory equipment, and new furniture. The project also includes construction of new, dedicated MEP infrastructure as well as sprinkler, fire alarm, and life safety upgrades as necessary to ensure compliance with all of Professor McIver's operating parameters. Additionally, the project will have a standalone Helium Recovery System which will work in conjunction with the system currently installed in the adjacent Basov Lab. The project will also supplement the existing processed chilled water system for laboratory equipment use on the 11th floor with a new heat exchanger on the 14th floor. The equipment fit-out will include lasers, optic tables, a cryostats, glovebox, helium recovery system, and compressors/pumps to support research.

Project Budget

| <u>rojeer budger</u> | Previous Request | Current Request | Total Request |
|-----------------------------------|---------------------|--------------------|------------------|
| Construction | \$18,500 | \$6,089,000 | \$6,107,500 |
| A/E Fees and Expenses | 451,000 | 308,500 | 759,500 |
| Furniture, Fixtures and Equipment | 0 | 217,000 | 217,000 |
| Hazardous Materials | 0 | 5,000 | 5,000 |
| Contingency | 45,600 | 940,400 | 986,000 |
| Commissioning | 14,000 | 198,600 | 212,600 |
| Project Management | 34,400 | 504,300 | 538,700 |
| Total | \$563,500 | \$8,262,800 | \$8,826,300 |

Project Financing

The current request of \$8,262,800 is based on bids received. The total request of \$8,826,300 will be funded with debt to be serviced by Arts and Sciences. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based on current cost estimates is \$8,826,300 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

The increase in maintenance and operations costs has been determined during this phase of the project. These costs, once determined, will be the responsibility of Arts and Sciences.

Energy Considerations

The increase in energy consumption costs has been determined during this phase of the project. These costs, once determined, will be the responsibility of Arts and Sciences.

Sustainable Design

Sustainable design components will be incorporated during this phase of the project.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations. Annual safety and security costs associated with this project will be \$205 per year after 2 years for ongoing maintenance and operation of Public Safety equipment.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

The firm of Spacesmith, an architectural firm, will provide design and engineering services. A General Contractor will be selected during this phase of the project to provide construction services. Columbia University Facilities and Operations Department of Capital Project Management will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project is not anticipated to affect the certificate of occupancy for the Northwest Corner Building.

Project Schedule

This phase of the project is scheduled to be completed in May 2024.

Date

Approved by:

| DocuSigned by: | |
|--------------------|-----------|
| David M. Greenberg | 4/26/2023 |

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

| Locusigned by: Long Hungerford A5545672718042D | 4/27/2023 |
|--|-----------|
| Amy Hungerford, Executive Vice President, Dean of the Faculty, Arts and Sciences | Date |
| | |
| DocuSigned by: | |
| Nancy Johnson E6080E9FD33C469 | 5/1/2023 |

Nancy K. Johnson, Vice President, Budget and Financial Planning

Columbia University Facilities and Operations Project Document No. 2023.027 Supplement to Project Document Nos. 2018.013, 2019.038, 2022.040 February 27, 2023 Page 1 of 4

Project Document

<u>JEROME GREENE HALL</u> <u>COLUMBIA LAW SCHOOL</u> <u>LIFE SAFETY SYSTEM UPGRADES</u> Entire Building Construction

Statement of Purpose and Need

Columbia Law School commenced a feasibility study and condition assessment to undertake a significant upgrade to the Arthur W. Diamond Law Library in Jerome Greene Hall, which serves as the primary center for research and study at Columbia Law School. During the feasibility study for the Library Renovation project, significant code, capacity, and life safety issues were identified throughout the building. As a result of this discovery, a new project was created for this scope.

This project will address life safety and code issues including legacy regulatory applications. These issues must be completed before undertaking any future capital projects within Jerome Greene Hall due to regulatory mandates.

Project Scope

The design and bidding services for this project were funded through previous requests as a part of the Library Renovation project. The specific design costs associated with this life safety systems project was removed from the Library Renovation project and are now reflected in the previous request column in the project budget section of this document.

The scope for this request includes a full-building fire alarm system replacement to meet current FDNY requirements, as well as installing sprinklers throughout the entire building and addressing various open code issues. This project does not include any HVAC upgrades or building envelope modifications.

A significant allowance for a fire watch has been included with this funding request which may be reduced substantially in negotiations with FDNY.

Collateral moves for the relocation of the staff and student study spaces are not included in this funding request. The law school intends to fund this work through operations.

Columbia University Facilities and Operations Project Document No. 2023.027 Supplement to Project Document Nos. 2018.013, 2019.038, 2022.040 February 27, 2023 Page 2 of 4

Project Budget

| | Previous Request | Current Request | Total Request |
|-----------------------------------|---------------------|--------------------|------------------|
| Construction | \$421,000 | \$15,411,700 | \$15,832,700 |
| A/E Fees and Expenses | 1,332,000 | 55,000 | 1,387,000 |
| Furniture, Fixtures and Equipment | 18,000 | 0 | 18,000 |
| Hazardous Materials | 145,000 | 0 | 145,000 |
| Contingency | 0 | 930,200 | 930,200 |
| Commissioning | 28,800 | 464,000 | 492,800 |
| Project Management | 126,400 | 1,096,000 | 1,222,400 |
| Total | \$2,071,200 | \$17,956,900 | \$20,028,100 |

Project Financing

The current request of \$17,956,900 is based on bids and proposals received and the total request of \$20,028,100 will be funded with \$10,028,100 in Columbia Law School operating reserves and \$10,000,000 in debt to be services by Columbia Law School. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$20,028,100 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no significant effect on operations and maintenance costs. At the conclusion of this phase however, a fire safety director will be required for the building at a cost of \$250,000 per year.

Energy Considerations

This project will have no significant effect on energy costs.

Sustainable Design

Sustainable elements will be incorporated into the construction processes. Costs associated with these components will be negligible.

Safety and Security

This project has been designed and will be constructed to be in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus.

Mode of Accomplishment

Perkins Eastman, an architecture firm, was selected to perform the design services. Shawmut Design and Construction was selected as a construction manager for pre-construction services and the construction. The Columbia University Facilities and Operations Department of Capital Project Management will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

Previous alterations to the certificate of occupancy will be addressed during this phase of the project in accordance with new and current regulatory requirements. At the completion of this phase, there will be one certificate of occupancy issued for Jerome Greene Hall that will facilitate future construction changes to the building.

Project Schedule

This phase of the project is scheduled to be completed in the Fall of 2024.

Columbia University Facilities and Operations Project Document No. 2023.027 Supplement to Project Document Nos. 2018.013, 2019.038, 2022.040 February 27, 2023 Page 4 of 4

Approved by:

| DocuSigned by: | |
|--------------------|-------------|
| David M. Greenberg | 4 /26 /2022 |
| E6ED1F01DABF44A | 4/26/2023 |

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

| DocuSigned by: Gillian Luster 73A2887DE445423 | 4/26/2023 |
|---|-----------|
| Columbia Law School | Date |

Gillian Lester, Dean, Columbia Law School

| DocuSigned by: | |
|---|----------|
| Nancy Johnson E6D80E9FD33C469 | 5/1/2023 |
| Vice President, Budget and Financial Planning | Date |

Nancy K. Johnson, Vice President, Budget and Financial Planning

Project Document

2900 BROADWAY RESIDENCE HALL CAMPUS SERVICES DORMITORY RENOVATIONS Basement to 1400 Level Design and Construction Phase

Statement of Purpose and Need

The purpose of this project is to refresh approximately 117,000 gross square feet of space in Broadway Residence Hall, located at 2900 Broadway, while the building is being closed for the first time in 12 years. This project is needed to upgrade the existing interior, bring the building pantries and restrooms into ADA compliance, and adhere to the latest 2022 building codes.

Project Scope

The scope of the project will include a refresh of all corridors, lounges, pantries, restrooms, and bedroom flooring from the basement level to 1400 level totaling approximately 140,000 square feet. The upgrading of the corridors will consist of new chair rails, ceiling grid and tile, carpet, LED lighting, and paint. The existing pantries will be refreshed to allow for ADA access and new open style cabinetry.

The restrooms in the south wing will be brought to ADA compliance by reconfiguring the 22 existing restrooms into 42 single use restrooms, including 9 ADA restrooms adjoined to student accommodations. The 22 existing restrooms in the north wing will be refreshed with new lighting, partitions, tile, paint, and fixtures.

Refresh work in the student bedrooms will include the updating of electrical outlets and switches, new bedroom furniture, and new bedroom flooring in all 336 bedrooms. Bedrooms from the 500 level to 1300 level will be reconfigured from two existing double bedrooms to a separate double bedroom at approximately 200 square feet and a separate single bedroom approximately at approximately 130 square feet. This will provide a greater level of comfort for the students, and bring the room sizes up to code.

T. . . 1

Project Budget

| | Total Request |
|-----------------------------------|------------------|
| Construction | \$4,800,000 |
| A/E Fees and Expenses | 139,600 |
| Furniture, Fixtures and Equipment | 762,800 |
| Contingency | 480,000 |
| Total | \$6,182,400 |

Project Financing

The total request of \$6,182,400 is based on benchmarking of prior comparable projects and bids received and will be funded with Campus Services operating reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$6,182,400 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

This project will have no effect on operations and maintenance costs.

Energy Considerations

This project will have no impact on energy consumption.

Sustainable Design

Sustainable elements of the project include the upgrading of all lighting fixtures to LED in the corridors, lounges, and pantries. In the restrooms, the upgrading of all partitions from metal to composite material will also occur. Costs associated with these sustainable components are estimated at \$400,000.

Safety and Security

This project will be designed and constructed in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act (ADA) requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible areas throughout the campus. The pantries and south wing restrooms will be updated to allow for ADA compliance and accessibility, specifically 9 ADA single use restrooms will be adjoined to student accommodation to allow for more convenience and safety for ADA students.

Mode of Accomplishment

An architectural firm and general construction firm will be selected during this phase of the project. Columbia University Facilities Department of Campus Operations will provide project management services for the project. All vendors are selected in accordance with University procurement procedures.

Certificate of Occupancy

This project will not affect the certificate of occupancy for Broadway Residence Hall.

Project Schedule

This project is scheduled to be completed by August 2023.

Approved by:

| DocuSigned by: | |
|---------------------------------------|----------|
| David M. Greenberg EGED1F01DABF44A | 3/7/2023 |

David M. Greenberg, Executive Vice President, Columbia University Facilities and Operations Date

| DocuSigned by: | |
|----------------------------------|----------|
| Nancy Johnson E6080E9ED33C469 | 4/3/2023 |

Nancy K. Johnson, Vice President, Budget, and Financial Planning

Date

Project Document

COLUMBIA UNIVERSITY IRVING MEDICAL CENTER THE NEUROLOGICAL INSTITUTE OF NEW YORK BUILDING COLUMBIA DOCTORS NEW YORK PRESBYTERIAN ADVANCED IMAGING <u>MRI SUITE EXPANSION</u> Basement Level Supplemental Construction Phase

Statement of Purpose and Need

In the second of two sequential construction phases, the Vagelos College of Physicians and Surgeons and the Department of Radiology seek to continue the renovation and expansion of its imaging facilities in the Neurological Institute of New York building, located at 710 West 168th Street. Phase I construction commenced in 2018 and will be completed in December 2019. Originally proposed to commence on November 1, 2022, Phase II construction was put on hold due to Covid. Phase II is being reactivated and will commence on November 1, 2022 and is to be completed by January 2024.

The project will replace an original facility consisting of three clinical MRI scanners with a new facility housing seven MRI scanners; six for clinical activity and one for research. The three original scanners were operating at capacity and were unable to accommodate demand for additional clinical volumes. Each scanner had also reached the end of its useful life and were no longer under vendor maintenance agreements. The modernized and expanded facility will now allow the Department of Radiology to maintain its original business volumes and conduct additional clinical and research activities.

Phase I construction activities will result in the installation of three new clinical scanners and one new research scanner to be donated by General Electric (GE). The three clinical scanners are sufficient to sustain the original clinical volumes of the facility. The additional research scanner will enable development and translation of new MRI software and hardware for specific diseases and indications and will provide a unique platform (only the second program internationally) for collaborative grant applications, especially NIH programs for academic/industrial partnerships.

Phase II renovations will result in the installation of three additional clinical scanners to capture demand for additional clinical volumes. The department is currently unable to accommodate all patient requests for imaging visits in a timely manner and has determined that significant imaging volumes are being referred to outside practices. Expanding clinical services will improve patient and physician satisfaction by enabling MRI exams to remain on campus. Phase II activity will also leverage certain facility infrastructure investments made in Phase I and will enable the department to increase overall efficiency and exam volume throughput.

The project area is approximately 18,000 gross square feet in the basement of the Neurological

Institute of New York building. All associated equipment will be procured and funded separately.

This is supplemental funding request is to restart and complete Phase II of the MRI Expansion project. The project was put on hold in 2020 due to Covid. The project was rebid and now accounts for the current market including restart delays.

Project Scope

The overall project scope includes the renovation of the three existing MRI suites and the construction of four new suites. Construction activities include phased demolition of the existing walls and partitions, abatement, phased construction of the new clinical and radiology rooms and infrastructure to support the new equipment.

Phase I includes the decommissioning of one existing 1.5T MRI and the installation of four new 3T MRIs (three clinical and one research).

Phase II will include the decommissioning one existing 1.5T MRI and one existing 3T MRI. Construction will allow for the phased installation of one new 1.5T MRI and two new 3T MRIs. Equipment will be installed over multiple years as needed to meet growth in clinical volumes.

The total request for construction excludes the cost of clinical MRI equipment valued at \$16.1 million (\$7.4 million for Phase I and \$8.7 million for Phase II). The equipment will be leased. Total lease and maintenance costs will be \$3.5M annually, \$1.6M for Phase I and \$1.9M for Phase II.

| <u> </u> | Previous Request | Current Request | Total Request |
|---------------------------------|---------------------|--------------------|------------------|
| Construction | \$32,744,000 | \$2,286,100 | \$35,030,100 |
| A/E Fees and Expenses | 3,463,000 | 0 | 3,463,000 |
| Hazardous Materials | 1,174,000 | 0 | 1,174,000 |
| Furniture, Fixtures & Equipment | 338,000 | 0 | 338,000 |
| Commissioning | 370,000 | 0 | 370,000 |
| Contingency | 3,808,000 | 229,500 | 4,037,500 |
| Project Management | 2,513,000 | 151,400 | 2,664,400 |
| Total | \$44,410,000 | \$2,667,000 | \$47,077,000 |

Project Budget

Project Financing

The current request of \$2,667,000 is based on bids (unleveled) for the restart of Phase II. The total project cost of \$47,077,000 will be funded with \$31,160,000 in previously approved debt to be serviced by the Vagelos College of Physicians and Surgeons, \$9,371,000 in funds from New York Presbyterian Hospital, \$4,685,500 in Department of Radiology operating reserves in Project

PC001118 and \$1,860,500 in School operating reserves in Project UR006887.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$47,077,000 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any impact on operations and maintenance costs will be assessed at the completion of construction. These costs, once identified, will be the responsibility of the Columbia University Irving Medical Center campus.

Energy Considerations

The additional MRI equipment will require more electrical power and cooling capacity. The costs for these services, once identified, will be the responsibility of the Columbia University Irving Medical Center campus.

Sustainable Design

Sustainability considerations will be incorporated into the project.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible buildings throughout the campus.

Mode of Accomplishment

Jeffrey Berman Architect and AKF Group were selected to provide design and engineering services. The general contractor for the project will be selected during this phase of the project.

Columbia University Facilities and Operations Project Document No. 2023.111 Supplemental to Project Document Nos. 2017.138, 2018.163, 2020.102 Columbia University Irving Medical Center –Proj-14372 September 30, 2022 Page 4 of 5

Project management will be provided by Columbia University Irving Medical Center's Capital Project Management department. All vendors are selected in accordance with University procurement procedures.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for the Neurological Institute of New York building located at 710 West 168th Street.

Project Schedule

This phase of the project is anticipated to be completed by the end of January of 2024.

Columbia University Facilities and Operations Project Document No. 2023.111 Supplemental to Project Document Nos. 2017.138, 2018.163, 2020.102 Columbia University Irving Medical Center –Proj-14372 September 30, 2022 Page 2 of 5

Approved by:

| DocuSigned by: | |
|---|------------|
| Rudi Odelı-Kamadan | 11/16/2022 |
| Rudi Odeh-Ramadan, Vice Dean, Finance and Administration | Date |
| Vagelos College of Physicians and Surgeons | |
| Patrick Burke | 11/18/2022 |
| Patrick Burke, Interim Vice President, Facilities Management, | Date |
| Operations & Planning | Date |
| Columbia University Irving Medical Center | |
| DocuSigned by: | 11/21/2022 |
| William P. McKoy, Senior Vice President and Chief Financial Officer | Date |
| Columbia University Irving Medical Center | |
| DocuSigned by: | |
| Nancy Johnson E6080E9FD33C469 | 1/30/2023 |
| Nancy K. Johnson, Vice President, Budget and Financial Planning | Date |
| Columbia University | |

Columbia University Facilities and Operations Project Document No. 2023.121 Supplement to Project Document No. 2021.107 Columbia University Irving Medical Center – Proj-15008, 15109 February 27, 2023 Page 1 of 4

Project Document

COLUMBIA UNIVERSITY IRVING MEDICAL CENTER ALLAN ROSENFIELD BUILDING VAGELOS COLLEGE OF PHYSICIANS AND SURGEONS BIOBANK FACILITY LABORATORY 1st Floor Construction Phase

Statement of Purpose and Need

The Vagelos College of Physicians and Surgeons (VP&S) seeks funding to renovate approximately 11,000 square feet on the 1st floor of the Allan Rosenfield Building to build a centralized biobanking facility. This project is the result of an \$8M National Institute of Health (NIH) Research Facilities Construction Grant (C06) submitted in February 2020 and awarded in September 2020. The main purpose of this project is to construct the required infrastructure to support the installation of up to two (2) automated, ultra-low temperature (ULT) freezer systems that together can store over 9 million biospecimens. The project will install one (1) freezer system as part of the base scope with the ability to add an additional freezer system to support Columbia University Irving Medical Center's (CUIMC) biobanking efforts as they continue to grow.

The biobank will support critical research into the basis of Alzheimer's and other neurological disease, human immunity and transplant rejection, and the health effects of exposure to environmental toxins. Aligning well with Columbia's long-term Precision Medicine Initiative, these biosamples will enable precision medicine studies to identify the underlying genetic basis for susceptibility and effectiveness of treatments for cardiovascular diseases, cancers, and other maladies including the University's rapid response to emergent needs like COVID-19.

Project Scope

The scope of work for the current request includes general construction services, special inspections, architectural and engineering construction administration services, expediting services, furniture, two (2) 1500-gallon LN2 tanks, two (2) biosafety cabinets, telecom wiring, security cameras and card readers, asbestos abatement, commissioning, signs, moving costs and physical plant support. The final deliverable of this phase will be a complete new central biobanking facility with one (1) freezer operational and the space for a future second freezer. This project will transform existing, unfinished space into a biobank room equipped with a mechanical infrastructure to support one (1) Brooks freezer, reinforced concrete space & rooftop mechanical dunnage space for a future second Brooks freezer, control area, prep room, tissue culture room, temporary storage freezer room, courier room, offices, pantry, lavatory and required mechanical rooms. Engineering and mechanical redundancies will be incorporated that ensure biosamples can be securely stored at a constant temperature for the 20+ year lifetime of the facility. **Project Budget**

Columbia University Facilities and Operations Project Document No. 2023.121 Supplement to Project Document No. 2021.107 Columbia University Irving Medical Center – Proj-15008, 15109 February 27, 2023 Page 2 of 4

| | Previous Request | Current Request | Total Request |
|-----------------------------------|---------------------|--------------------|------------------|
| Construction | \$40,000 | \$10,220,284 | \$10,260,284 |
| A/E Fees and Expenses | 608,000 | 798,300 | 1,406,300 |
| Furniture, Fixtures and Equipment | 2,147,200 | 427,500 | 2,574,700 |
| Hazardous Materials | 0 | 84,400 | 84,400 |
| Contingency | 280,000 | 1,159,600 | 1,439,600 |
| Commissioning | 0 | 65,000 | 65,000 |
| Project Management | 56,000 | 716,886 | 772,886 |
| Total | \$3,131,200 | \$13,471,970 | \$16,603,170 |

Project Financing

The current request of \$13,471,970 is based on bids received and the total request of \$16,603,170 will be funded with \$8,000,000 in NIH grant funds, \$7,540,914 of VP&S operating reserves in UR006887, and \$1,062,256 of CUIMC state of good repair reserves. The final allocation of sources of funding will be made prior to the issuance of University debt.

This is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to permanently fund the project, based upon current cost estimates is \$8,603,170 plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to permanently finance such costs with University funds.

Operations and Maintenance

Any impact on operations and maintenance costs will be assessed at the completion of the construction documents. These costs, once identified, will be the responsibility of the Columbia University Irving Medical Center

Energy Considerations

Any impact on energy costs will be assessed at the completion of the construction documents. These costs, once identified, will be the responsibility of the Columbia University Irving Medical Center.

Sustainable Design

Columbia University Facilities and Operations Project Document No. 2023.121 Supplement to Project Document No. 2021.107 Columbia University Irving Medical Center – Proj-15008, 15109 February 27, 2023 Page 3 of 4

Sustainability considerations will be incorporated into the project including LED lighting, a new building management system-controlled HVAC system, lighting sensors and timers, low VOC finishes, the incorporation of furniture and finishes containing recycled material content and recycling programs for staff waste.

Safety and Security

This project will be designed and constructed to be in accordance with all University and New York City safety and security regulations.

Consideration for the Disabled

This project will be designed to comply with the 2010 Americans with Disabilities Act requirements and Columbia University's commitment to accessibility. This project will include the appropriate building accessibility upgrades to further the goal of fully accessible buildings throughout the campus.

Mode of Accomplishment

A general contractor will be selected during this phase of the project to provide construction management services. Columbia University Irving Medical Center Facilities Capital Project Management will provide project management services for the project. All vendors are selected in accordance with the University's procurement policies.

<u>Certificate of Occupancy</u>

This project will not affect the certificate of occupancy for the Allan Rosenfield Building

Project Schedule

This phase of the project is scheduled to be completed by August of 2024.

Approved by:

Columbia University Facilities and Operations Project Document No. 2023.121 Supplement to Project Document No. 2021.107 Columbia University Irving Medical Center – Proj-15008, 15109 February 27, 2023 Page 4 of 4

| DocuSigned by: | |
|---|------------------|
| Rudi Odeli-Kamadan | 3/6/2023 |
| Rudi Odeh-Ramadan, Vice Dean, Finance and Administration Vagelos College of Physicians and Surgeons | Date |
| Patrick Burke 128DC0B08E884B6 | 3/6/2023 |
| Patrick Burke, Vice President of Facilities Management, Operations and Planning Columbia University Irving Medical Center | Date |
| William P. McKoy, Senior Vice President and Chief Financial Officer Columbia University Irving Medical Center | 3/6/2023 Date |
| Nancy K. Johnson, Vice President, Budget and Financial Planning Columbia University | 4/3/2023 Date |

AUTHORIZATION OF TAX-EXEMPT FINANCING FOR RESIDENTIAL FACILITIES FOR FISCAL YEAR 2022

June 11th, 2021

<u>BACKGROUND</u>, as indicated in the University's current five-year Capital Plan, Residential Facilities has prepared a Fiscal Year 2022 state of good repair capital budget totaling \$31.5 million for existing apartment renovations, building system upgrades and other repairs. Of this amount, up to \$28.4 million may be funded from external debt. This resolution of official intent to finance expenditures with tax-exempt debt is necessary to maximize the Residential Facilities capital expenditures eligible for such debt.

<u>PROPOSAL</u>, the Executive Vice President for Finance recommends that a declaration of official intent to finance be issued for up to \$28.4 million in Residential Facilities capital expenditures for Fiscal Year 2022.

<u>RESOLUTION</u>, on motion, the Committee voted to adopt the following resolution:

<u>RESOLVED</u>, this is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to fund the project permanently, based on current cost estimates, is \$28.4 million plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with the bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to finance such costs permanently with University funds. The final allocation of sources of funding will be made prior to the issuance of University debt.

AUTHORIZATION OF TAX-EXEMPT FINANCING FOR RESIDENTIAL FACILITIES FOR FISCAL YEAR 2023

June 3rd, 2022

<u>BACKGROUND</u>, as indicated in the University's current five-year Capital Plan, Residential Facilities has prepared a Fiscal Year 2023 state of good repair capital budget totaling \$38.85 million for existing apartment renovations, building system upgrades and other repairs. Of this amount, up to \$35.39 million may be funded from external debt. This resolution of official intent to finance expenditures with tax-exempt debt is necessary to maximize the Residential Facilities capital expenditures eligible for such debt.

<u>PROPOSAL</u>, the Executive Vice President for Finance recommends that a declaration of official intent to finance be issued for up to \$35.39 million in Residential Facilities capital expenditures for Fiscal Year 2023.

<u>RESOLUTION</u>, on motion, the Committee voted to adopt the following resolution:

<u>RESOLVED</u>, this is a declaration of official intent for purposes of United States Treasury Regulations Section 1.150-2. The maximum principal amount of bonds expected to be issued to fund the project permanently, based on current cost estimates, is \$35.39 million plus costs of issuance and any reserves established in connection with the bonds. To the extent that costs increase, it is expected that the principal amount of bonds will be increased to fund the project. Any costs temporarily financed on an interim basis with University funds are expected to be reimbursed with the bond proceeds to the extent that such costs are not funded with external sources and to the extent the University does not elect to finance such costs permanently with University funds. The final allocation of sources of funding will be made prior to the issuance of University debt.