

National Capital Planning Commission (NCPC) Narrative

P-001 Master Time Clocks and Operations Facilities
U.S. Naval Observatory, Washington D.C.

This Project Report has been prepared regarding the Mater Time Clocks and Operations Facilities at the U.S. Naval Observatory in Washington, D.C. This report has been prepared for the submission of this project to the National Capital Planning Commission (NCPC) for Preliminary review.

A. NARRATIVE MATERIALS AND DATA

1. Project Report

a. Name and telephone number of agency project manager

Dagoberto Portillo, (202) 685-3546, dagoberto.portillo@navy.mil, Project Manager
Nik Tompkins-Flagg, (202) 685-8437, Nicole.tompkins-flagg@navy.mil, NAVFAC Liaison to NCPC

b. Narrative description of the project, including existing conditions to be affected and a summary of the basic design concept on which the physical form of the proposal is based

The United States Naval Observatory (USNO) performs an essential scientific role for the United States, the Navy, and the Department of Defense. Its mission includes determining the positions and motions of the Earth, Sun, Moon, planets, stars and other celestial objects; providing astronomical data; maintaining precise time; determining the Earth's orientation in space; and maintaining the Master Clock for the Department of Defense. Observatory physicists, engineers and technicians develop and maintain the Master Clock and its dissemination systems. This astronomical and timing data, essential for accurate navigation and the support of communications on Earth and in space, is vital to the Navy and Department of Defense. It is also used extensively by other agencies of the government and the public at large.

An extensive Basic Facilities Requirements (BFR) and programming analysis was performed as a part of a "REGION/FEC FINAL 1391," for the P-001 project, Master Time Clocks and Operations Facilities, at the Naval Observatory in Washington, D.C. The BFR confirmed the need to build a new Master Clock Facility (Building 51), and to renovate Buildings 3, 52/52A and 78 to accommodate the required functions and personnel for the project. Building 3, the Original Clock Building, will continue to serve as operations base and sleeping quarters for the astronomers.

The P-001 Master Time Clocks and Operations Facilities project is a very challenging and complex project and has many conflicting requirements and constraints. The existing and new facilities must meet the mission and project requirements while also being designed and constructed to integrate into the existing site and landscape, and be compatible with the existing buildings and spatial organization on the US Naval Observatory campus.

Please see the attached Concept Report for further information on the existing conditions and concept design for the project. This report serves as the Preliminary Submittal to NCPC to

continue the review process that began during the Design Charrette Meetings held March 20 – 23 2018 at the US Naval Observatory.

c. Total area of site and allocation of land to proposed uses

Existing Building Area	29,210 SF (0.67 ac)
New Building Area	14,770 SF (0.34 ac)
New Pavement Area	12,400 SF (0.28 ac)
New Sidewalk Area	3,925 SF (0.09 ac)
Bio-retention/Bio-swale Area	11,725 SF (0.27 ac)
Miscellaneous Equipment Area	500 SF (0.01 ac)
Landscaped Area	50,215 SF (1.15 ac)
Total Disturbed Area	122,745 SF (2.82 ac)

d. Area of building(s) and site coverage

Building	Square Footage	Existing or New
Building 3	3,240 SF	Existing
Building 51	14,950 SF	New
Building 52	49,420 SF	Existing
Building 52A	11,620 SF	Existing
Building 78	11,110 SF	Existing

e. Existing assigned employment and projected assigned employment over a 20-Year period, in 5-year increments

Building	Existing (2018)	Projected (2020)	Net Change
Building 3	4	2	-2
Building 51	-	6	+6
Building 52	86	121	+35
Building 52A	10	31	+21
Building 78	22	29	+7
Total	122	189	+67

f. Description of the relationship of the project to the agency’s master plan, where applicable, including rationale for any deviations

This project was not captured in the 2014 Master Plan. The need for the new facility was determined as a result of the BFR conducted which showed that a new facility for the Master Time Clocks was necessary. While this project as it is moving forward was not captured in the Master Plan, it is consistent with the goals and land use outlined in the master plan. The construction timeline for this project is outside the scope of the current master plan, but will be captured in the formal master plan update.

The 2014 Master Plan outlined development strategies including: renovating existing facilities that can still serve as viable facilities for similar or new uses (Buildings 3 and 78); and concentrating redevelopment of existing facilities or infill new construction within existing employment hubs to further densify developed areas and maintain building clusters. This project is consistent with both of these strategies by renovating existing facilities (Buildings 3, 52, 52A, and 78) and locating the new Building 51 within the RDT&E employment hub. The siting of the new Building 51 is in an area that will still be deemed RDT&E in the long-term land use framework plan.

g. Status of coordination with affected local and state governments and the Metropolitan Washington Council of Governments (COG) for projects not previously coordinated through an installation master plan

This project has been the subject of an EA which included coordination with several agencies at including the DC SHPO, NCPC, CFA, the Advisory Council on Historic Preservation (ACHP), the U.S. Fish and Wildlife Service (USFWS) and the District Department of Energy and Environment (DOEE).

h. Status of community participation, including summary of community views

Public participation is a required of implementing NEPA procedures. The Navy solicited agency and public comments. The Navy published a Notice of Availability (NOA) of the Draft EA in *The Washington Times* on February 6, 7, and 8, 2017. The notice described the Proposed Action, solicited public comments on the Draft EA, provided dates of the public comment period, and announced that the EA was available for review. No public comments were received.

i. Schedule for construction and occupancy

The overall project construction duration is expected to be approximately 5 years, 3 months (63 months), beginning in October of 2019 and ending in December 2024.

Building	Timeline
Building 3	March 2020 – November 2020
Building 6 and 7 Foundations	March 2020 – November 2020

Building 51	April 2020 – November 2023 (all clocks installed and commissioned)
Building 52A	May 2022 – November 2023
Building 52	August 2022 – December 2024
Building 78	January 2023 – December 2024

j. Total estimated cost of project and funding status

The current estimated project construction cost is approximately \$101.1 million, just below the “Design to” Construction Cost Limitation (CCL) of \$101,154,152.00.

k. Transportation Management Program

The U.S. Naval Observatory has a Transportation Management Program that was approved along with the Master Plan in 2014. The additional employees at the installation is under the threshold for requiring a new TMP. While there will temporary impacts to traffic around the installation as a result of the construction vehicles, it is likely to be considerably less than 1 percent of the current traffic in the area. While this project will add 54 personnel to the installation population, no new parking spaces will be constructed. The addition of these employees will bring the parking ratio from 1:1 to 1:1.21. In the long term, if all 54 new employees were to drive to the installation (which is unlikely), there would be an increase of 0.3% to the traffic of the surrounding area. Therefore, there are no significant long-term impacts to the traffic of the area as a result of this project. The increase in employees will be captured and analyzed with the formal update to the US Naval Observatory Master Plan and TMP.

2. Environmental Documentation

This project is subject to the National Environmental Policy Act (NEPA) and will be covered under an Environmental Assessment. The EA, which is underway, analyzed the following resource areas: Air Quality, Water Resources, Cultural Resources, Biological Resources, Noise, Infrastructure, Public Health and Safety, and Hazardous Materials and Wastes. There are no significant impacts to Air quality, Water Resources, Biological Resources, Noise, Infrastructure, Public Health and Safety, or Hazardous Materials and Waste. The final document is expected to be complete with a signed FONSI in December 2018.

3. Historic Preservation Documentation

All of the proposed work will take place within the Naval Observatory Historic District, a National Register-eligible district. In addition, Buildings 3 and 78 are National Register-eligible buildings and Building 52 is a contributing building within the district. The work will have an adverse effect on the National Register-eligible historic district. Therefore, in accordance with the provisions of Section 106 of the National Historic Preservation Act, the project is subject to an extensive consultation with multiple Consulting Parties including the DC State Historic Preservation Officer (DC SHPO), the National Capital Planning Commission (NCPC), the Commission of Fine Arts (CFA) and the National Park Service National Capital Region. The Section 106 effort is being conducted within the National Environmental Policy Act (NEPA) effort. The effects of the project

will be mitigated through negotiation of a Memorandum of Agreement (MOA) with the Consulting Parties. The estimated timeline for the signed MOA is October 2018.

4. Floodplain Management and Wetlands Protection

The entire USNO site is outside the 100-year and 500-year floodplains. No wetlands were encountered on the USNO site.

5. Executive Order 13514 and EISA, Section 438

The site will comply with the stormwater management requirements of Executive Order 13693, EISA 2007 Section 438, and the 2013 DDOE Stormwater Rule. It will employ Best Management Practices (BMPs) to achieve the required stormwater retention volume greater than the post-development runoff from the 90th percentile rainfall event (in this case, 1.7-inch rainfall depth). The intent of exceeding the code requirement is to accrue stormwater credits, where space is available for additional retention, to be applied to future projects. The proposed site is not located in the Anacostia Waterfront Development Zone, and therefore is not subject to additional water quality treatment.

The roof of Building 51 will drain into a bioretention facility to the northeast, which has an emergency overflow that will be provided to prevent flooding of any buildings for the 100-year design storm. The renovations of Buildings 3, 52, 52A, and 78 are all considered major substantial improvement projects per the 2013 DDOE Stormwater Rule. As such, stormwater management will be provided for these buildings. Building 3 is at the site high point. Runoff from the site drains off in all directions, including towards Building 51. The road adjacent to Building 51 is sloped away from the building, so all runoff from near Building 3 will drain to the bioswale adjacent to the road. The bioretention facilities at Building 52/52A and Building 78 will be located downstream of the buildings so that no flooding of buildings will occur for the 100-year design storm.

See the attached Concept Report for further information.