MEMORANDUM

- From: COLIN MACKILLOP, AIA, LEED AP, CDT
- To: ANN TROWBRIDGE, AIA
- RE: NASM BUILDING EXTERIOR ENVELOPE STUDY AND HVAC REPLACEMENT WASHINGTON, DC SF 1206101 QEA 31301800



2121 WARD PLACE, NW, 4TH FLOOR WASHINGTON, DC 20037 202 298 6700 Subject: 07 April 2017 NEPA / Section 106 Meeting Notes Time: 11:00am to 12:30pm

Attendees: SI-OPDC: Debra Nauta-Rodriguez, Ann Trowbridge (AT), Sharon Park (SP), Jane Passman (JP), Carly Bond Smithsonian Central: Linda St. Thomas NASM: Alison Mitchell CFA: Thomas Luebke (TL), Sarah Batcheler (SB) DC SHPO: Andrew Lewis (AL) National Gallery of Art (NGA): Susan Wertheim (SW), Hillary Lord Casey Trees: Elisa Carter, Kristin Taddei NPS NAMA: Audrey Tepper (ATep) AOC: Jamie Herr NCPC: Lee Webb, Matt Flis, Vivian Lee (VL) QEA: Colin MacKillop

- 1. Introduction
 - a. AT -- We thank all attendees for their time as part of this important process. Comments should be made to Vivian Lee at NCPC via the NCPC website http://www.ncpc.gov/.
 - b. VL NCPC is the sponsoring agency for the EA process.
- 2. Presentation
 - a. AT presented a summary of the draft EA and cladding aesthetic mockup.
 - b. TL Surprised the ceramic and titanium alternate materials was dismissed due to lack of longevity rather than character
 - c. AL It should be noted that Tennessee marble was selected to match the National Gallery of Art West Building, which is a key point of Section 106 compliance. VL – The gates of the sculpture garden are also TN marble. NMAH is TN pink, but a lighter shade, which thus may appear to be a different material.
 - d. VL Due to spatial constraints at the south entrance, the proposed canopy would require the Continuum sculpture to be relocated. AT – The relocated position is being reviewed to provide the optimum location regarding visibility, as well as protection from vandalism, etc.
 - e. SP Key findings per draft MOA.
 - i. Adverse effect determination varies depending on the stone selection.ii. There is a cumulative adverse effect for the balance of the project,
 - including changing three levels of the building's plinth to two level of planters, the entry vestibules and sculpture relocation.
 - Some minimization measures for the project, include maintaining key original plantings in the landscape, preserving views of the building, and installing non-visible PV's on the main roof.
 - iv. If south canopy is constructed, PV's on the roof are intended to have limited reflectivity, which should be facilitated with ongoing development of PV technology and reviewed through mockups.
 - f. SP A HABS documentation report is scheduled to begin over the summer using Level III standards.
 - g. SP If nomination is not possible on this building as a result of the stone cladding selection altering the building's historic integrity, it will be pursued for NMNH
 - h. SB Are determination of effects included in the matrix? AL No, that is NEPA only. VL The NEPA analysis of effects on historical components is

WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI documented in the NEPA chapter and summarized in the matrix. SB – Is the cumulative effect not adverse? SP – It is an adverse affect.

- SB Wouldn't any project at NMNH require mitigation? SP No, the currently proposed projects were determined not to require mitigation. AL Not certain if eligibility will be maintained if TN marble is not used. MOA is a draft, looking for comments. Pursuit of national historic status will offset this. VL We are looking for creative ideas for mitigation.
- 3. Discussion: TN Marble
 - a. AL The replication of the original range of colors is the central issue. The contrast of the various colors on the north wall of the TN marble mockup is jarring, but much more integrated on the south wall. The mockup shows that TN pink has the greatest variation in color of the materials presented.
 - b. TL Does NGA East Building have the complete range of TN marble colors? SW We could check the East Building range. The East Building was more limited compared to the West Building. Only 6 panels needed to be replaced of 17,000 during the recent re-cladding. SW We have records we can share. Carl Campioli, our Senior Architect on NGA staff, would know. The marble consultant for the construction of the East Building was Malcom Rice. Some panels were sand blasted on site in 1976 (after NASM was opened) to mitigate the visual difference between contrasting colors as documented in black & white photos.
 - c. AT -- Early May is the target for a decision on cladding selection. VL –An NCPC meeting was conducted yesterday, but a decision was not made as it was an information presentation. Some comments from commissioners included statements that UHPC had potential. LW Some negative comments were made regarding Echo Lake granite and St Clair limestone. AT Mina Wright was sick and not able to attend.
 - d. SB There is a concern regarding the ability to install new TN marble in a manner that matches the existing TN marble façade that is a design concern, not at the NEPA level. Are you looking for us to comment? We don't want the full range of colors to be applied with a splotchy pattern. AT Yes, we are looking for comment. SB TN marble will not be acceptable if not properly controlled. AT We are looking into this now, including options for a dry lay at the quarry. SW: maintain control in specifications. TL The reality of the challenges to match will add cost. SB The challenges of risk, such as waste, should be listed among the cons in the EA.
- 4. Discussion: Vestibule Canopy
 - a. SW The vestibule canopy should be timeless, and design refinement is needed to ensure this. For example, the restaurant addition appears dated. Wonder if there are other ways to evoke/convey a sense of flight. TL An addition should be designed to communicate the era in which it was built. ATep: the vestibules are a major change in character. AL: They are reversible.
 - b. SB The south canopy looks confined by the limited available area.
 - c. TL There is concern that the PV's on the south would be different material than the fabric of the north vestibule. CM – The PV's proposed on the south canopy would be installed on a limited area of the same fabric proposed for the north canopy.
 - d. TL CFA staff would like a follow up review of the canopies with design refinements to help ensure the design is evocative of flight as intended and less earthbound. AT – The intent is to schedule a consultation soon once a direction regarding the cladding selection is established. TL – The consultation can wait a few months if needed.
- 5. Cladding Aesthetic Mockup Review
 - a. SB NCPC comments aside, UHPC is terrible. St.Clair looks like concrete.
 - b. AL St. Clair looks almost brutalist. Echo Lake represents too much of a change in character. DNR – Echo Lake panels were installed on the NASM facade as a substitute for a limited number of TN marble panels that had been removed.
 - c. TL With the risk that new TN marble is not installed in manner that matches the existing, the Echo Lake provides an appropriate change in



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character with a fleuri pattern that evokes the imagery of the cloud nebula. A fleuri cut of TN marble may decrease contrast between colors.

- d. TL Of the finishing options presented for the TN marble, the two step finishing process of bush hammered and sandblasted is preferred as it mutes the difference in color while maintaining the expression of tone and pattern. The one step finish process consisting of only bush hammered provides a pixilated appearance with excessive contrast between the raised and lowed surfaces with dark and light accents.
- e. AT Paver selections provided. The dark gray pavers provide a contrast with the cladding, allowing the pink tones to be emphasized. The Stoney Creek visually competes with the TN marble due to its similar color.



1. QEA to confirm the range of TN marble colors included on the NASM façade.

Any discrepancies or disagreements with the author's interpretation of this meeting should be brought to the attention of Quinn Evans Architects in writing within seven working days from issuance of these notes.

END OF MEMORANDUM

