

Meeting Minutes

FROM: EHT Traceries
SUBJECT: Smithsonian South Mall Campus Master Plan
Section 106 Consulting Parties Meeting #4 - Castle
DATE: October 7, 2015

The following minutes represent comments received during the October Section 106 consulting parties meeting for the Smithsonian South Mall Campus Master Plan.

Consulting Parties

Name	Organization
Andrew Lewis	DC HPO
David Maloney	DC HPO
Thomas Luebke	CFA
Sarah Batcheler	CFA
Mina Wright	GSA
Jonathan Rogers	DDOT
Pat Tiller	Committee of 100
Richard Busch	Committee of 100
Rebecca Miller	DC Preservation
Tisha Allen	League
Elizabeth Merritt	NTHP
Will Cook	NTHP
Kristin Grotecloss	NTHP
Rob Nieweg	NTHP
Perry Klein	SWNA
Tricia Bonner	Washington Gas
Joyce Saginam	Department of Justice
Robert Snieckus	USDA
Jeff Winstel	WMATA
Kate Perry	
Cynthia Field	
David Maxfield	

Lead and Cooperating Agencies and Project Team

Name	Organization
Sharon Park	SI
Ann Trowbridge	SI
Michelle Spofford	SI
Christopher Lethbridge	SI
John Lapiana	SI
Peter May	NPS
Kathryn Smith	NPS
Susan Spain	NPS
Jennifer Hirsch	NCPC
Cheryl Kelly	NCPC
Lucy Kempf	NCPC
Matthew Flis	NCPC
Aran Coakley	BIG
Janice Rim	BIG
Bill Marzella	EHT Traceries
Laura Hughes	EHT Traceries
Liz Estes	Stantec
Robin Griffin	Stantec
Kirk Mettam	Silman
John DeKraker	Silman
Shane Maxemow	Silman

Tour

Consulting parties were invited to attend an optional tour of the Castle, which immediately preceded this meeting.

Presentation

1. Lucy Kempf, NCPC, welcomed meeting attendees.
2. Ann Trowbridge presented an overview of the meeting agenda and goals, the Section 106 and NEPA schedule, the Section 106 process, and a summary of comments and responses from the June consulting parties meeting.
3. Christopher Lethbridge (CL) presented the program needs for Phase 1 of the South Campus Master Plan, which will focus on the Castle expansion and rehabilitation.
 - a. CL also presented a summary of program benchmarks for similar institutions.
4. Sharon Park (SP) presented an overview of the history of the Castle and SI's approach to its historic preservation treatment. This presentation included historic and current photographs, morphology diagrams, planning objectives, preservation zone diagrams, and preservation definitions.
5. Kirk Mettam (KM) presented an overview of the seismic investigation for the Castle, including seismic vulnerabilities, seismic climate based on USGS design basis standards, architectural preservation vs. life safety, base isolation and other protection methods, and comparable examples.
6. CL presented Master Plan alternatives, including elements common to all alternatives (Castle rehabilitation), action alternatives, and comparison of accommodation of program needs by alternatives.
7. SP invited discussion and questions.

Discussion/Questions

1. Rebecca Miller, DC Preservation League, asked if there were examples of base isolation on the east coast for buildings, including at the St. Elizabeths campus in D.C.
 - a. KM replied that there were no other examples for east coast buildings. He explained the St. Elizabeths Center Building was an example of excavation, similar to the type of excavation that would be required at the Castle in combination to the base isolation work.
 - b. Miller stated that she was curious about the need for base isolation and its context in terms of west coast examples. KM clarified that the design basis earthquake presented was for Washington, DC (not the west coast).
 - c. SP added that the desire to protect the Castle building was driving the approach, and that SI was relying on the expertise of their structural engineers for advice. The Castle is a unique building, and SI is excited to adopt an innovative method for its protection.
 - d. KM reiterated that the familiarity of base isolation on the east coast is growing and that the method offers tremendous improvements in performance in addition to life safety.
 - e. CL added that base isolation is not a significant extension of traditional underpinning and is widely used on the east coast in highways and bridges.
 - f. Miller asked how this approach differs from the repairs at the Sherman Building at the Armed Forces Retirement Home. KM replied that the Sherman Building was repaired, but that no accommodation was made for a future earthquake.
2. Rick Busch, Committee of 100, stated that it was not clear what effect the seismic retrofit would have on the Castle in comparison with traditional reinforcement. He referenced an earlier diagrammatic representation of traditional bracing that showed large X's on the Castle.
 - a. Rob Nieweg (RN), NTHP, also stated that he was confused by that diagram, and that it was unclear whether the bracing was external or internal. SP responded that the diagram in

- question represented the traditional bracing method on the interior of the building, and that it would be removed from future presentations.
- b. SP also responded that base isolation would result in no visible difference to the Castle, but that an exterior areaway would be necessary and would be fully integrated into the new landscape design.
3. Kathryn Smith, NPS, asked if the stresses described in KM's presentation were based on USGS design standards. KM confirmed that they were. Smith also:
 - a. Stated that the presentation was very helpful in describing the more technical aspects of the seismic report that had been posted to the project website;
 - b. Requested additional information on the feasibility of a partial retrofit (such as the centerline drilling method described in the report on page 28) to provide a lesser degree of protection; and
 - c. Asked if the NPS Preservation Brief on the Seismic Retrofit of Historic Buildings (although somewhat dated) had been referenced in arriving at the preferred approach.
 - d. KM replied that a partial approach would not be adequate to meet code requirements (or even reduced code requirements). SP and CL clarified that base isolation would be used in tandem with localized treatments (to improve attics, diaphragms, and lateral conditions) to achieve optimal resistance.
 4. Mina Wright (MW), GSA, asked if a uniform approach was necessary, or would a hybrid approach that accounts for the buildings irregularity be possible. For example, could only the main block of the Castle be isolated. KM responded that isolating only a portion of the building would require a vertical joint and would not be a viable solution. KM added that under base isolation, the entire building would experience a greatly reduced force, but that some additional internal reinforcement would be necessary.
 5. Sarah Batcheler (SB), CFA, asked where the base isolation joint (or moat) occurs. CL and KM described a joint of approximately 18" around the perimeter of the building that allows for a "crumple zone" that accepts damage during a seismic event. The joint is covered with a sacrificial finish, making it not visible or immediately apparent.
 - a. Tom Luebke (TL), CFA, asked where the joint occurs, given the various footprints of the basements in the project alternatives. KM responded that it would occur along the footprint of the existing Castle foundation.
 6. TL expressed his preference for allowing questions throughout the presentation, rather than at the end.
 7. TL asked how the USGS design standards differed from the stresses of the 2011 Mineral earthquake, as the Castle appeared to have experienced only damage to the chimneys on the East Wing.
 - a. CL responded that SI conducted extensive survey of the building following the earthquake, and that damage included both chimneys and interior plaster. Some destructive testing was conducted, but the full assessment of damage cannot be known given the structural design of the building.
 - b. KM responded that not all earthquakes are the same, and that using a statistical analysis (such as the USGS design standard) is not always adequate to fully anticipate risks.
 - c. SP added that the damage necessitated several hundred thousand dollars' worth of repair. TL asked if this repair work had been documented or made available to the public.
 8. RN stated that a more detailed comparative analysis between traditional and base isolation methods would be helpful for his understanding. For example, the seismic report could describe the potential hazards of implementing base isolation. TL and later seconded this request.
 - a. KM responded that some amount of risk was inherent to the base isolation approach, which could be minimized dramatically by hiring qualified contractors and using the best available technology.
 - b. RN reiterated his request to have both cost and risk analysis for both treatment methods. Andrew Lewis (AL), HPO, seconded that request. AL added that the repairs to the Sherman Building had generated to adverse effects to that resource.

- c. CL responded that the Castle treatment had been identified as the first phase of the Master Plan and that SI was entering the conceptual design phase to further develop techniques and cost projections, but that this phase will need to align with the greater planning process. CL stated that SI will fully consider both costs and effects of appropriate treatments before any approach is selected.
9. Jonathan Rogers, DDOT, asked about the material presented for the upcoming meeting and if that would include Independence Avenue. He also asked about the status of loading studies.
 - a. SP responded that the Independence Avenue studies were on hold, but that SI would continue to work with DDOT to develop loading.
 - b. JR requested that the realignment of the Independence Avenue sidewalk be removed from Alternative D. SI confirmed that it would be.
10. TL requested additional information on program development and the need to accommodate the entire stated program within the Castle and expanded basement levels. SP responded that the size and efficiency of the central services were driving a majority of the program needs in terms of volume and adjacencies. SP added that they hoped to show an example from the National Museum of African American History and Culture in the following meeting.
11. Peter May, NPS, stated that he was struggling to understand the magnitude of the project and the relative costs. He said that, given considerations of cost, base isolation may not appear as beneficial, but that additional information would be helpful in that determination. May also stated that he was less concerned with the expansion into or near NPS-administered property.
12. David Maloney, HPO, stated that he appreciated that the restoration of significant Castle interiors was included in all alternatives. He also questioned the need to accommodate the entire stated program within the Castle and expanded basement.
13. MW stated that she was sympathetic to SI in achieving its Master Plan goals, but that additional information and an improved narrative would be needed to fully understand the objectives and alternatives campus-wide. MW also asked if the Arts & Industries Building (AIB) was still being considered as a potential site for the Museum of the American Latino. SI confirmed that it was, and that it placed limitations on long-term planning for the building. CL responded that SI would endeavor to include a more complete narrative in future meetings.
14. Cynthia Field discussed the availability of historic structural drawings for the Castle, and she encouraged SI to consult experts in historic engineering (such as the Historic American Engineering Record).
15. SB questioned the deficit of office space in each alternative. CL responded that most of the administrative offices in the Castle would be relocated offsite, which is part of the larger plan narrative that would be helpful to address.

Conclusion and Next Steps

1. SP outlined that the schedule for upcoming consulting parties meetings. SP also indicated that the next meeting would focus on campus infrastructure, materials handling, and loading and was projected to occur in early December.
2. SP reminded the consulting parties of the materials posted on the project website, www.southmallcampus.si.edu.
3. Any additional comments can be emailed to Michelle Spofford at spoffordm@si.edu.

Minutes prepared by Bill Marzella, EHT Traceries, October 12, 2015