



**CITY OF TEMPE
HISTORIC PRESERVATION COMMISSION**

Meeting Date: 11/08/2023
Agenda Item: 5

Memorandum

To: Historic Preservation Commission

From: Zachary J. Lechner, Historic Preservation Officer (ex. 8870, zachary_lechner@tempe.gov)

Date: November 1, 2023

Subject: Agenda Item #5, Forthcoming Hayden Butte and Papago Park Preserves Management Plan

Representatives of Logan Simpson Design (Wayne Colebank and John Southard) will make a presentation and solicit Commission feedback on their firm's preparations for the Hayden Butte and Papago Park Preserves Management Plan, which the City of Tempe has hired Logan Simpson to complete.

Attachment:

Logan Simpson, Scope of Work for Hayden Butte and Papago Park Preserves Management Plan



May 19, 2023

Mr. Craig Hayton
Interim Director
City of Tempe Community Services Department
3500 South Rural Road, 2nd Floor
Tempe, Arizona 85282

Subject: Revised Proposal for Hayden Butte and Papago Preserves Management Plan
(Logan Simpson Proposal 22-3201)

Dear Mr. Hayton:

Logan Simpson is pleased to submit this revised Scope of Work and Fee estimate to prepare a Management Plan (MP) for the Hayden Butte and Papago Preserves.

Logan Simpson can initiate the work within seven (7) business days after receiving an executed contract and Notice to Proceed. Our proposed schedule for submittal of the various documents is as shown in the enclosed Schedule. Our estimated fee for this work is also enclosed.

Should you have any questions, please do not hesitate to contact me or John at the email addresses below or at (480) 967-1343. We look forward to working with you on this project.

Sincerely,

Wayne Colebank
Principal/Landscape Architect
wcolebank@logansimpson.com

John Southard
Chief Historian/Historic Preservation Program Lead
jsouthard@logansimpson.com

Attachments: Scope of Work and Fee Estimate



INTRODUCTION

The City of Tempe (City) wishes to develop a Management Plan (MP) to address resource preservation, maintenance, and asset management in the Hayden Butte and Papago Park Preserves. The MP will identify necessary improvements, establish maintenance practices, and serve as a basis for implementation for both Preserves. Additionally, the MP will identify and prioritize medium or long-term priorities for investments in the Preserves, as well as identification of a limited number of turnkey projects or activities that could be immediately undertaken if funding becomes available. As part of the work, a presentation to the City's Desert Conservation Commission will be required.

The primary goals for the MP are to conserve and protect the Preserves' resources while ensuring accessibility to all user groups. The project area is located in the traditional homeland, the *O'Odham Jeved*, of the *Akimel O'Odham* (formerly Pima) and the *Piipaash* (formerly Maricopa) people who currently reside in the Salt River Pima-Maricopa Indian Community (SRP-MIC) and the Gila River Indian Community (GRIC). Outreach and coordination with Tribal and non-Tribal stakeholders will play a significant role in shaping the MP. The Scope of Work in this proposal identifies the outreach efforts proposed for both stakeholder groups; however, the full extent of consultation and outreach with the Four Southern Tribes of Arizona (FST) (SRP-MIC, GRIC, Ak Chin Indian Community [ACIC], and Tohono O'Odham Nation [TON]) is not knowable at this time and may require services beyond those identified herein.

The MP will be developed in four phases using an interdisciplinary approach. The first phase will identify and assess the natural, cultural, recreational, and structural resources of the Preserves. Next, the management goals for the Preserves and associated success metrics will be identified. Phases three and four of MP will consist of the development of best management practices (BMPs) and suggested future actions. Coordination with the City, the SRP-MIC and the GRIC, the public, and other stakeholders will be conducted throughout development of the MP.

To meet the City's MP goals, Logan Simpson will complete the tasks defined below.

PHASE 1 - IDENTIFYING AND ASSESSING THE NATURAL, CULTURAL, RECREATIONAL, AND STRUCTURAL ELEMENTS PRESENT IN THE PRESERVES

1.1 Natural Resources

Logan Simpson will conduct a selected inventory of the existing natural resources within the Hayden Butte and Papago Preserves using a combination of a desktop review of existing information sources and fieldwork to fill in data gaps. Where applicable, natural resources will be identified using or building upon knowledge of City staff and/or the methodology used in existing management plans such as the draft Hayden Butte Preserve Management Plan (2017), the Papago Park Regional Master Plan (2010), and others.

1.1.1 Geology, Topography, Soils, Drainage

Natural resources within the Preserves will be assessed using the following specific methodologies:



Geology. Geology will be mapped using existing maps produced by Nations and Stump (1996) or using site-specific information as available such as the *Geologic Cross Sections of Papago Park Pediment* map produced by Arizona State University.

Topography. Topography will be mapped using 10 meter U.S. Geological Survey (USGS) digital elevation models.

Soils. Soils will be identified using the U.S. Department of Agriculture Natural Resource Conservation Service's online Web Soil Survey.

Drainage. Onsite drainages will be mapped by Logan Simpson personnel in the field. Fieldwork will be informed by existing aerial imagery, maps created by the USGS National Hydrography Dataset, the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory, and the draft Hayden Butte Preserve Management Plan. Information gathered will be sufficient to identify any onsite drainage features that may be subject to regulation under the Clean Water Act.

1.1.2 Flora and Fauna

Representative flora and fauna will be assessed using existing resources, including maps of onsite biotic communities, ecoregions identified by the U.S. Environmental Protection Agency, and vegetation as represented by the USGS Southwest Regional Gap Analysis Project (SWReGAP). Areas with the potential to support riparian or wetland vegetation will be identified using maps prepared by the USFWS National Wetlands Inventory, available aerial imagery, and fieldwork findings. Lists of species previously recorded within the Preserves will be compiled based on existing reports and online repositories such as eBird.org, SEINet flora projects, and iNaturalist.

Current conditions for flora and fauna will be assessed using techniques similar to the Terrestrial Visual Encounter Survey (TVES) method, which is a pedestrian survey that identifies presence through direct observation and/or evidence of species use. The TVES method includes visual and aural confirmation of a species and evidence of sign for species such as burrows, nests, feathers, fecal material, or tracks. The TVES method will be used to assess representative flora and fauna with specific focus on regulated and/or high-interest flora and fauna and their habitats; however, all species encountered will be identified to the extent possible. Information on terrain, existing disturbance, and other relevant conditions will also be collected as part of onsite field observations.

In addition to general flora and fauna, specific categories of regulated and/or high-interest flora and fauna will be evaluated as follows:

- ***Special Status Species.*** The potential for Threatened or Endangered species protected under the Endangered Species Act (ESA) to occur within the Preserves will be assessed. Threatened and endangered species with records in the vicinity of the Preserves will be identified using information provided by the USFWS and Arizona Game and Fish Department. The potential for each species to occur onsite and potential areas of habitat will be assessed using a combination of field and desktop review. Management recommendations will be provided for any ESA-listed species that are found to have a potential to occur within the Preserves. Other special status species such as Species of Greatest Conservation Need identified in Arizona's State Wildlife Action Plan will be assessed using a similar methodology.



- *Noxious Weeds and Invasive/Non-native Species.* The Arizona Department of Agriculture has adopted regulations to prevent the spread of noxious weeds. During our site visits, Logan Simpson will identify and map the significant patches of state-listed noxious weed species found within the Preserves. Mapping will be informed by and will build upon previous work conducted for the draft Hayden Butte Preserve Management Plan and by the Desert Defenders. In addition to identifying invasive plants, Logan Simpson will identify other invasive species found within the Preserves during fieldwork and desktop review and describe their location and abundance. For example, non-native birds such as European starlings and rock pigeons are common with the Preserves and a non-native apple snail from South America is known to occur in the canal in the LoPiano Bosque Habitat.
- *Species of Tribal Concern.* Logan Simpson recognizes that tribal input is critical to developing a successful MP for the Preserves. Therefore, Logan Simpson will subcontract Councilman Jacob Butler of SRP-MIC during the early stages of our natural resources assessment to identify culturally significant flora and fauna. Once the natural resources inventory has been completed, Mr. Butler will provide descriptions of the cultural significance of flora and fauna found onsite. Logan Simpson's Cultural Specialist, SRP-MIC Community member, Jonathon Curry, who also has a background in O'Odham and Piipaash traditional-use plants, and our native plant expert, Judy Mielke, will assist Mr. Butler in compiling a "practical ethnobotany" of the preserves. As certain stands of medicinal or other plants of Tribal concern may be identified as Traditional Cultural Properties (TCPs), this list will also inform the TCP inventory (see Section 1.2.2 below). Mr. Butler will be consulted during the development of BMPs and Future Actions for the MP (see Phase 2 and Phase 3 below), as well. The assessment of flora and fauna will include qualitative descriptions of the ecological function of each community type present within the Preserves as well as the relative ecological value of communities as they relate to Preserve management goals. Logan Simpson will use the information gathered to create a map of representative floral and faunal communities within the Preserves.

Documentation. Resource-specific information gathered during the desktop review and field assessment for Tasks 1.1 thru 1.2.1 will be used to categorize and map the various portions of the Preserves by amount of anthropogenic disturbance, preservation value, and restoration value. Results of the natural resources inventory and assessment will be described in the draft MP report.

In coordination with the cultural resource and the recreational and structural resources teams, categorizations identified in the natural resources assessment and inventory report will be used to identify various management zones within the Preserves; BMPs and other management recommendations will be developed for each management zone within the final MP.

1.2 Cultural Resources

1.2.1 Class III Survey

The Hayden Butte and Papago Preserves are situated on City-owned land, and therefore any development with the Preserves is subject to compliance with the Arizona Antiquities Act (AAA) and the City's Historic Preservation Ordinance (TCC Chapter 14A). The Hayden Butte Preserve has been subjected to multiple cultural resources investigations, and the cultural resources have been thoroughly documented. Part of the Hayden Butte Preserve has been designated as site AZ U:9:165(ASM) and is listed on both the National and Arizona Registers of Historic Places (N/ARHP) and the Tempe Historic Property Register (THPR). A cultural resources inventory survey is thus not



recommended for the Hayden Butte Preserve. In contrast, the Papago Preserve has not been subjected to a thorough Class III cultural resources survey that meets current Arizona State Historic Preservation Office (SHPO) standards and the Arizona State Museum (ASM) site definition criteria developed in 1995. Therefore, the entirety of the 227.4-acre area of the Papago Preserve will be subjected to a Class III cultural resources inventory survey that meets the current SHPO and ASM standards.

Logan Simpson's cultural resources inventory investigation will include a background records search (Class I inventory) for both the Tempe Butte and Papago Preserves and a surrounding 0.5-mile radius. Relevant records will be examined from the National Register Information System, an online database of properties that have been listed on N/ARHP; the THPR; AZSITE, an online database of cultural resources in Arizona; and through an in-person or virtual appointment with the ASM Archaeological Records Office in Tucson. In addition, historical documents—e.g., General Land Office, USGS, and Sanborn Fire Insurance maps as well as Flood Control District of Maricopa County aerial photographs—will be evaluated for potentially undocumented cultural properties within the project vicinity. Findings from the records search will be included in the final report to provide further information about the cultural and archaeological history of the Tempe Butte and Papago Preserves. In addition, the boundaries of previous projects and recorded sites, as well as features depicted on historic maps that are within the survey area, will be uploaded into Trimble GPS units to provide useful data for archaeologists during the pedestrian field survey.

Logan Simpson's Class III cultural resources inventory survey will focus exclusively on the 227.4-acre Papago Preserve. During the intensive, pedestrian survey, field crews will adhere to parallel transects spaced not more than 20 m apart to assure complete coverage of the survey area in accordance with current SHPO survey standards. All cultural resources identified during survey will be evaluated according to the ASM site criteria, as defined in the 1995 Revised Site Definition Policy. Resources that meet the ASM site criteria will be documented according to standards outlined in the ASM site-recording manual. For each site, field crews will complete the ASM site form and produce a detailed site map; describe all site attributes, such as features and environment in detail; conduct an intensive in-field analysis of artifacts; and photograph the site area and environment, surface features, diagnostic artifacts, and any areas of disturbance. In addition, any historic structures within the Papago Preserve will be documented using a SHPO Historic Property Inventory Form (HPIF) or Historical In-use Structure Inventory Form (HISF), as appropriate. Documented cultural resources will be evaluated for their N/ARHP-eligibility based on their integrity and significance under the four criteria outlined in 36 CFR 60 and per guideline presented in National Register Bulletin 15, *How to Apply the National Register Criteria for Evaluation*. Each resource will be evaluated based on an appropriate time-place-theme historic context.

Logan Simpson will conduct the survey under the terms and conditions of our current ASM-issued AAA blanket permit for non-collection surveys (2022-054bl), and all survey and reporting will be completed in accordance with current SHPO and ASM standards and guidance points. The project will be managed by an experienced archaeologist that meets or exceeds the SHPO standards and professional qualifications for archaeology. Logan Simpson also will submit a Notification of Intent (NOI) to ASM prior to fieldwork and provide regular updates to the City Historic Preservation Officer (HPO) concerning the survey findings and schedule of deliverables.



Preliminary research suggests that portions of the Papago Preserve were subjected to archaeological investigations at various times during the early to mid-1900s, during which at least 14 archaeological site numbers were designated, all but one of which is located in the area between Curry Road and north bank of the Salt River/Tempe Town Lake. Many of these old numbers likely refer to the same site, sites that are no longer visible on the ground surface, or closely spaced sites that can be merged into larger sites. The Papago Preserve includes AZ U:9:10(ASM), also known as Loma del Rio, which is listed in the THPR and has been determined eligible for the A/NRHP. This site encompasses a late Classic period (ca. AD 1300–1450) Hohokam masonry architecture room block that has been preserved in place as a public exhibit. Using current Class III survey methodologies, therefore, we expect that fewer than 14 sites will be identified in this previously unsurveyed area and anticipate documenting 10 archaeological sites within the grounds of the Preserve, including AZ U:9:10(ASM) and other previously recorded sites. We also anticipate identifying and documenting up to 10 historical structures within the Preserve using an HPIF or HISF.

Logan Simpson will begin technical report production immediately following completion of the Class I background records search. The report will summarize the project background as well as the environmental and cultural settings; organize and synthesize the results of the Class I records review; present the methods and results of the Class III cultural resources survey; and provide N/ARHP- and THPR-eligibility recommendations and management recommendations for each cultural resource identified in the project area, including descriptive justifications for the recommendations. The report will be subjected to a three-stage Quality Assurance/Quality Control (QA/QC) process, which includes a technical review of all data by the project manager, a content review by the principal investigator, and a final review by the cultural team director or principal. This review process ensures clarity and compliance with ASM, SHPO, and City HPO standards. Logan Simpson will revise the report based upon two rounds of agency comments; one revision based upon comments from the City HPO, and a second revision based upon comments from ASM and possibly other consulting parties. We anticipate submitting the draft report within approximately four (4) weeks after completing the survey fieldwork.

Following formal acceptance of the technical report, the final report will be provided to the City and curated with the ASM. Note that ASM charges a mandatory registration fee for all projects, plus additional fees for project review, storage of paper records, and digital curation. A formal quote will be requested from ASM to obtain the actual fee; however, we estimate the total ASM fee to be approximately \$2,700.

1.2.2: Traditional Cultural Property Inventory

Logan Simpson will seek the assistance and support of Tribal Historic Preservation Officers (THPOs) for the SRP-MIC and the GRIC in the identification of Traditional Cultural Properties (TCPs) in the project area. National Register of Historic Places (NRHP) guidelines as provided in their Bulletin 38, *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, defines a TCP as “one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuity of cultural identity of the community” (Parker and King 1998:1). TCPs are important because they play a critical role in the retention and transmission of traditions and cultural practices. Sacred sites are specific locations where Native American



religious practitioners go, or have historically gone, to perform ceremonial activities in accordance with traditional cultural rules of practice. Traditional cultural places or properties may include sacred sites; however, under Executive Order 13007, sacred sites are not the same as TCPs. A wide range of information sources can be used to identify TCPs. These sources address the cultural background and history of a study area that enable the researcher to have an idea of the frequency and kind of TCPs that might be present. In general, each property, whether natural, historical, ethnographic, or archaeological, should be evaluated for NRHP-eligibility on its own merits and on a case-by-case basis. Natural resources or properties, including springs, mineral deposits, stands of plants, landscapes, and topographic features, are not by definition TCPs unless they are clearly associated with the cultural beliefs and practices of a living community. Under NRHP guidelines, archaeological sites also are not TCPs unless they are clearly associated with the cultural beliefs and practices of a living community and have “integrity of location, design, setting, materials, workmanship, feeling, and association” (36 Code of Federal Regulations [CFR] Part 60).

Logan Simpson’s ethnography team will complete a TCP study that addresses both Preserves. The team will first compile relevant ethnographic and ethnohistorical information from published and unpublished sources, including existing reports, as a baseline of information for the identification of TCPs in or near the project area. With the permission of the SRP-MIC and GRIC THPOs, this will include a review of existing confidential TCP inventories. The results of the Class I cultural resources inventory will also be used to identify possible TCPs. This research will be used in the preparation of a TCP assessment of the study area.

The TCP study will include a fieldwork component. Qualified members of Logan Simpson’s ethnography team will complete a TCP survey within the Papago Preserve concurrent with the Class III survey. The field research will consist of six components:

- Ethnography team members (with a background in TCP identification) will visit and assess previously recorded cultural properties in or immediately adjacent to the study area (and evaluate their TCP eligibility).
- The ethnographic team member will visit and evaluate natural topographic features; possible traditional travel corridors (trails); natural water resources (washes); or other landscape features in or adjacent to the study area that may be TCPs but do not conform to standard ASM site definition.
- The ethnographic team member will visit any newly recorded archaeological sites (identified during Class III survey) and evaluate their TCP eligibility.
- Ethnography team members will conduct interviews with Tribal member cultural experts or elders regarding the project area. It should be noted that due to dwindling numbers of elders with direct experience or knowledge of the study area or associated cultural traditions, it is impossible to specify a number of interviews that will be conducted, or which experts will be contacted. Logan Simpson will seek guidance provided by the affiliated THPOs (SRP-MIC and GRIC) for identifying and contacting cultural experts.
- Based on the preceding research tasks, Logan Simpson may arrange one or more field visits for affiliated THPO staff and/or cultural experts to sectors in the study area to evaluate culturally sensitive areas and possible TCPs.



- Unless it conforms to the boundary of a recorded archaeological site, it is generally not the practice of the FST to identify TCP boundaries. Logan Simpson will meet with SRP-MIC THPO to identify and recommend project specific administrative TCP boundaries for use in developing the MP.

Logan Simpson will conduct two (2) planning meetings (in-person or virtual) with SRP-MIC and GRIC THPO representatives, one prior to the initiation of the Class III cultural resource survey and TCP inventory and one following their completion to present and discuss initial results. An optional on-site meeting with representatives from both THPOs will be entertained to visit sites and TCPs, if so desired.

Logan Simpson will produce a technical report that summarizes the cultural setting of the study area; discusses the methods and results of the TCP study; and offers NRHP-eligibility evaluations and management recommendations for each cultural property reviewed in the report. Recommendations based on consultation with the SRP-MIC THPO for project-specific administrative boundaries will also be included. The draft TCP report will be submitted for review with the HPO and the SRP-MIC and GRIC THPOs. Logan Simpson will address all comments on the draft report received from agencies. Upon approval, the final report will be provided to the City and incorporated into the MP (likely as a confidential appendix).

TCPs include a wide variety of properties, some of which are extremely culturally sensitive. As with all cultural properties, TCP locations are not to be made public; likewise, any information regarding TCPs within the traditional lands of the Akimel O’Odam and Piipaash must be held in the strictest confidence and may not be released without permission of the City and the affiliated, descendent community(ies) or Tribal entity(ies).

1.2.3: Archival and Historical Research

The land comprising the Preserves boasts a rich history of settlement, trade, travel, cultivation, and other uses documented to date back many millennia. Archival research focusing on documented prehistoric, protohistoric, and historic period flora and fauna, land ownership, usage, alterations, and significance will inform multiple aspects of the planning and drafting processes. Logan Simpson historians will glean such information, along with other needed research, through a review of primary and secondary resources related to the project area. In addition to published secondary sources, the archival research team will gather information from sources such as 1860s General Land Office maps and notes, historic newspapers, manuscript, and photo collections held at repositories such as the Arizona Heritage Center, the Arizona State Archives, Arizona State University, the City, and relevant Federal agencies.

1.3. Recreational and Structural Resources

1.3.1 Inventory Recreational Amenities/Use Areas

Inventory and Identify Recreational Amenities and Assets. Logan Simpson will field survey, photograph, and document existing amenities, assets, and recreation infrastructure of the Papago Preserve. These features could include physical, above-grade elements and features such as accessibility; hiking/biking trails; informational signs; ramadas/shade structures; climbing rocks; and bike tracks. We expect that City staff will meet us during the all-day field review (or in a different venue prior to the field review) to share their knowledge and experience of the uses,



successes, issues, and challenges of the Papago Preserve, with particularly emphasis on the northern portion of the site.

Identify Areas of Use/Amenities. Based on the information generated during the inventory, Logan Simpson will meet with and coordinate with the City to identify and categorize primary areas of recreation use (i.e., active, passive etc.) within the Papago Preserve. Key landforms, viewing points, geologic features, and/or vegetative masses important to recreational use of the Preserve will also be documented. Additionally, as part of this task, we will incorporate relevant information gained as part of the natural and cultural resources studies.

Overlay Preserve limits/Identify Easements and Rights-of-Ways. Because of the extent and potential complexities of the Preserve boundaries and utility easements associated with the Salt River Project (SRP) facilities in the north end of the Preserves, Logan Simpson will subcontract with Dibble Engineers to confirm the Papago Preserve boundaries and to conduct title searches for any utility easements or rights-of-way that may encroach into the Preserve. The findings will be mapped and included in the mapping to be prepared as part of the MP document.

1.4 Engage Stakeholders and City Staff

1.4.1 Workshops

We will conduct a series of workshops with the City, non-Tribal stakeholders, and/or Tribal stakeholders (at the FST's discretion) to understand the current recreation use in the Papago Preserve and to ascertain if there is a need/desire to modify, improve, or relocate the current use areas. The workshops would include:

Workshop One. Logan Simpson will facilitate City-organized Workshop One (in person) with project stakeholders and Tribal representatives to introduce the project and its purpose, establish the goals for the MP, to solicit information from the participants, and to identify potential programs (land uses and activities) and management actions to be incorporated into the MP. The Workshop will be conducted in an interactive format to receive input from the stakeholders on their issues, concerns, needs, and vision for the MP area. The proposed MP planning process and schedule will be discussed as well as any public participation strategy.

The key to developing a program of uses and management plan for the MP's area starts with an understanding of stakeholder expectations for the types of experiences that are being looked for and the specific types of activities and facilities that should be planned for. This information will be obtained by asking participants to elaborate on their desires, expectations, and required uses and activities to be incorporated into the MP. From this information, initial programming concepts related to potential uses, features, conservation measures, and metrics to be included in the MP can be developed.

The Workshop will consist of an initial session where the desired goals and programs are to be discussed, followed by solicitation of the stakeholder input, and a wrap up session where observations about the site and/or earlier discussions can be revisited. Workshop One is expected to have a two (2) hour duration. Up to four (4) aerial maps of the MP areas will be prepared for the Workshop. The structure and agenda for the Workshop will be determined as part of a two (2) hour Workshop planning session in advance of the Workshop.

Workshop Two. At this in person workshop, we will review the agreed-upon goals and vision for the MP area, present the results of Workshop One and the field survey findings plus begin to



discuss/develop schematic land use/activity zone alternatives and conservation measures. The workshop will be divided into two parts. The first part of the workshop will be as noted above. The second and primary portion of the workshop will be focused on the participants responding to schematic land use/zone alternatives, as well as an initial list of conceptual approaches or specific management/conservation measures. In preparation for the Workshop, Logan Simpson will prepare up to three (3) initial schematic land use/zone alternatives to foster discussion. The schematic alternatives will indicate optional locations and arrangements of the programmed uses and activities, and areas of general development, preservation, or rehabilitation as well as vehicular and trail routes. During the Workshop, Logan Simpson will mark up the pre-prepared diagrams or generate new or portions of new diagrams to record the participants' suggestions and recommendations. We anticipate that Workshop Two will have a two (2)-hour duration. A similar approach will be used to discuss pre-prepared list of conservation measures and metrics.

Prior to Workshop Two, Logan Simpson will meet with the City to discuss the findings of our natural and cultural resources studies; the proposed land use/zone alternatives; and potential conservation measures. This meeting will be used to determine the alternatives (or portions of alternatives) and measures to be presented at Workshop Two. This meeting is anticipated to be a two (2)-hour activity. Up to three (3) original MP diagrams will be prepared for the Workshop. The content of the boards will be determined during the Workshop planning activities.

Workshop Three. The goal of the third in-person workshop will be to update the participants on the planning process to date and to gather input on up to two (2) conceptual MP alternatives that will be generated by Logan Simpson to address different levels of development or resource conservation. Logan Simpson will develop and present the alternatives that will address proposed land uses/zones, features, and facilities; vehicular and pedestrian access and routes; maintenance access; proposed utilities (if applicable); drainage; recreation opportunities; interpretive or environmental educational opportunities; culturally significant use areas; and wildlife and vegetation management. Similarly, concomitant management activities will be presented. The schematic alternatives developed in Workshop Two will be used as input in the development of the conceptual alternatives. The conceptual plans will be described in terms of site compatibility and compliance with the MP's goals and objectives, as well as resource impacts. Success metrics will also be discussed. Workshop Three is anticipated to have a two (2) hour duration. Prior to Workshop Three, Logan Simpson will meet with the City to provide a preview of the two conceptual MP alternatives. Up to two (2) original MP diagrams will be prepared for the Workshop.

Workshop Four. The fourth and final in-person workshop will be held to present the Preliminary MP and provide a final opportunity to receive additional comments. Logan Simpson will produce and present a Preliminary MP based on the results of the comments from Workshop Three and continued stakeholder input. The Preliminary MP will delineate the features, facilities, and program elements, and document all aspects of the Plan. The presentation will include a brief review of the data gathering, site analyses, ideation, and alternatives phases. It is expected that the Preliminary MP will be made up of elements from the preferred MP alternatives from Workshop Three and/or a combination of other considered alternatives. Prior to Workshop Four, Logan Simpson will meet with the City to provide a preview of the Preliminary MP to be presented. This workshop will be held in-person or in virtual format, as agreed upon, over a two (2)-hour period. Up to two (2) MP graphic diagrams, modified from Workshop Three, will be prepared for the Workshop.



1.4.2 Desert Conservation Commission and Historic Preservation Commission Presentations.

Logan Simpson will make separate, initial in person presentations to the Commissions at the start of the project to clarify the scope of work and to obtain input on any objectives/outcomes that the Commission members would desire to occur. Secondly, Logan Simpson will present the Preliminary MP to the Commissions to allow for comments and suggestions prior to completing the Final MP. We anticipate that the presentations will be completed in a PowerPoint format and will be standalone presentations from other agenda items that may also be presented at the meeting. In general, the presentation will utilize the materials and graphics prepared during the MP process as the basis for the imagery. The presentations are intended to be less than 15 minutes in length and will be provided to the City at least five (5) days before the presentation to allow for any adjustments.

PHASE 2 – IDENTIFICATION OF PRESERVE MANAGEMENT GOALS AND SUCCESS METRICS

2.1 Preserve Management Goals/Metrics

A key component of the MP will involve the development of a list of management goals for the Preserves. Logan Simpson will review existing master plans and documentation such as the Preserve charters, Desert Conservation Commission goals and objectives, 2010 Papago Park Master Plan, the 2017 draft Hayden Butte Preserve Master Plan, the Tempe Parks and Recreation Master Plan, the 2022 Tempe Historic Preservation Plan, and others as applicable to develop a draft list of management goals. Logan Simpson will propose qualitative and/or quantitative metrics and methods, as appropriate, for each management goal that will enable the City to determine the success of management actions. Preserve management goals will be framed in the context of management zones, which will be identified by Logan Simpson's interdisciplinary team in coordination with the City. Management zones will be identified based on the presence and quality of natural, cultural, and recreational/structural resources present within the various spatial components of each Preserve.

The draft list of management goals and success metrics will be provided to the City for review and comment; we assume up to three rounds of comments will be addressed. The final list of management goals will be used to develop the BMPs and future actions described in Phase 3 and Phase 4 of MP development.

PHASE 3 - BEST PRACTICES FOR THE MANAGEMENT OF RESOURCES WITHIN THE PRESERVES

3.1 Best Management Practices

Phase 3 of the MP development will focus on identifying BMPs for Preserve resources. BMPs will formalize standard operating procedures for the Preserves and detail how procedures will be implemented. BMPs will include assessment, maintenance, and replacement intervals; responsible parties; training procedures; and processes and requirements for the various management zones identified during Phase 2. The BMPs will be based on representative resources, amenities, and assets and apply a wholistic methodology for maintenance and operations, where any unidentified asset would be served by the prescribed approach as much as those that have been identified. Logan Simpson will coordinate with City staff to identify practices currently used within the Preserves and to identify successful current practices as well as existing challenges and opportunities.



PHASE 4 - NEAR, MEDIUM, AND LONG-TERM ACTIONS

4.1 Near, Medium, and Long-Term Actions

Using the information contained in existing documents such as the Papago Park Regional Master Plan and draft Hayden Butte Preserve Management Plan, through our own research, as well as the opportunities for funding or partnerships revealed during each of the workshops identified in this scope of work, Logan Simpson will identify and categorize possible actions that could either provide greater protection of the Preserves' resources, improve the accessible and functionality of current/future uses, or promote the awareness of the uniqueness of the Preserves through informational programs and signage. While the emphasis of the list to be prepared under this task will be on identifying modifications or improvements to the Preserves if funding became available immediately or over multiple years, the activities could also include identification of future studies and analysis of the on-site resources to assist in determining changes in the management approach to these resources. The identified actions will be grouped into near, medium, and long-term categories. It is expected that no more than twenty (20) activities will be identified.

MP DOCUMENT

Upon completion of the field survey for each of the resource areas, Logan Simpson will prepare draft narrative reports of the findings for the Natural, Cultural, and Recreational and Structural Elements for the City's review. The narratives will serve as the basis for the descriptions to be contained in the MP once the drafts have been reviewed and commented on by the City. Note that the flora/fauna and cultural resource investigations will also be documented in standalone reports that will be summarized in the MP.

The MP will include a discussion of the Papago Preserve's substantial history and background (refer to Subsection 1.2.3), introduction to the MP initiative, a description of the field survey methods, findings of the surveys, and results of stakeholder outreach. Preserve management goals, BMPs, and potential future actions will also be included. This initial submittal of the compiled MP will occur subsequent to Workshop Three. The initial submittal will include summaries of the resource write ups. Up to three (3) reviews of the compiled MP are anticipated by the City, Tribes, and stakeholders prior to finalization. To facilitate ease of use by City staff, the BMPs and future projects for both Preserves, as described in Phases 3 and 4, will be shown in a single table. This will allow management staff the ability to view, at a glance, the recommendations for each Preserve while also being able to assess their cumulative needs. The MP will be organized similarly to the draft Hayden Butte Preserves Management Plan with narrative text, photographs, illustrative maps, precedent images, references, and photo credits. The MP will be prepared in digital (pdf) format.

ESTIMATED FEE

Logan Simpson's fee estimate for completing the above-mentioned tasks is summarized in the table below. The fee estimate includes labor hours and expenses required to complete the enclosed Scope of Work. Expenses assumed in this proposal include mileage, reprographics, anticipated ASM registration and curation fees, and drone insurance. This work will be invoiced monthly on a fixed fee/lump sum basis with final payment due upon submittal of the MP document.



Scope of Work Tasks	Fee	Comments
Phase 1		
<i>1.1 Natural Resources</i>		
1.1.1 Geology, Topography, Soils, Drainage, Management Zones, Task Coordination	\$14,116	
1.1.2 Flora and Fauna	\$32,825	
<i>1.2 Cultural Resources</i>		
1.2.1 Class III Survey	\$33,691	
1.2.2 Traditional Cultural Property Inventory (TCP) Inventory	\$54,909	Includes Jacob Butler
1.2.3 Archival and Historical Research	\$25,080	
<i>1.3 Recreation and Structural Resources</i>		
1.3.1 Inventory Rec. Amenities/Use Areas	\$22,474	
1.3.2 Easements and Rights of Way	\$15,683	Includes Dibble Engineering
<i>1.4 Stakeholder Engagement</i>		
1.4.1 Workshops	\$38,765	
1.4.2 DCC/HPC Presentations	\$6,353	
Phase 2		
<i>2.1 Preserve Management Goals/Success Metrics</i>		
2.1.1 Preserve Management Goals/Metrics	\$12,240	
Phase 3		
<i>3. Best Management Practices</i>		
3.1.1 Best Management Practices	\$22,430	
Phase 4		
<i>4. Near, Medium, and Long-term Actions</i>		
4.1.1 Near, Medium, and Long-term Actions	\$12,020	
Total Fee	\$290,555	

PROPOSED SCHEDULE

The proposed schedule for completing the activities in this Scope of Work is enclosed. A refined schedule of activities will be provided subsequent to a Notice To Proceed.



ASSUMPTIONS

- The previously prepared draft Hayden Butte Preserve Management Plan, dated May 2017, contains an assessment of selected natural, cultural, recreational, and structural elements within the Hayden Butte Preserve. The draft Hayden Butte Plan findings are organized by Existing Conditions, Recommended Improvements, Implementation Guidelines, and Management Practices categories. For the purposes of this proposal, we assume that the information/findings in the draft Hayden Butte Management Plan can be utilized as is. However, we expect that some of those findings will no longer be considered accurate or correct by the stakeholders and will need to be revisited as part of the MP preparation. We have included a minimal effort to coordinate with the City on the need to re-evaluate the findings but have not included labor hours to undertake the re-evaluation since the extent of that work cannot be estimated at this time. A modification to this Scope of Work and an adjustment in our fee will be required to reassess any Hayden Butte Preserve elements.
- It is anticipated that the illustrative maps produced under this contract will be similar to those included in the draft Hayden Butte Preserve Plan, including Overall Site/Boundaries; Geology/Soils; Topography; Slope Analysis; Drainage; Flora and Fauna; Cultural Resources; Historic Resources; Contemporary Features; Trails/Recreation Use; Land Use and Development, and Rights-of-Way/Utilities.
- Topographic information used in the document mapping will be obtained from available public sources. No contour surveying or aerial flights will be used to obtain the Papago Preserve topography.
- The City will be responsible for developing the stakeholder list, securing rooms/meeting locations, paying for any insurance for the meeting locations, developing and distributing any meeting invitations, and forwarding to the stakeholders meeting notes/documentation prepared by Logan Simpson. The stakeholder list will be provided to Logan Simpson soon after the Notice to Proceed.
- Should the City desire to have an on-site workshop for the stakeholders, it would likely require a modification to this contract to provide the additional services and activities (i.e., shade tents, refreshments, etc.).
- We assume that project presentations will be limited to two (2) Desert Conservation Commission and two (2) Historic Preservation Commission meetings. No presentations to other committees, panels, or boards will be required.
- No soil fertility testing will be completed under this contract.
- Preparation of a Biological Assessment or ESA consultation with the USFWS is not included.
- No species-specific protocol surveys will be completed under this contract.
- No formal Jurisdictional Delineation or Clean Water Act permitting documentation will be prepared for submittal to the U.S. Army Corps of Engineers.
- A slope stability analysis will not be conducted under this contract.
- Invasive species mapping will occur in a single mobilization conducted during the growing season.



- The project will require Class III cultural resources inventory survey of no more than approximately 227 acres. If additional survey acreage adjacent to or outside the Papago Preserve is required, a modification to this Scope of Work and Fee will be required.
- The Scope of Work and Fee does not include the development of a Historic Properties Treatment Plan, archaeological construction monitoring, archaeological testing, archaeological data recovery, or HABS/HAER/HALS-level documentation of historical structures.
- The paper and digital records and report from the cultural survey must be curated with the ASM. As such, Logan Simpson will incur ASM registration and curation fees, the total for which we estimate to be approximately \$2,700. Logan Simpson will bill the City the actual amount invoiced by ASM.
- During the Class III survey, no more than 10 cultural resource sites and 10 historical buildings, structures, or objects requiring documentation using a HPIF or HISF will be identified and documented in the survey area. If more than 10 cultural resource sites or 10 historical buildings, structures, or objects are encountered, a modification to this Scope of Work and Fee will be required. Should district documentation be required, then a modification of this scope of work and fee schedule will be necessary.
- This Scope of Work and Fee includes involvement by the most closely affiliated Tribal communities who identify the project area as part of their traditional homeland. It does *not* address efforts to identify and resolve adverse effects to TCPs or more advanced subtasks that may be required for Tribal consultation and/or future implementation of the MP. Tribal stakeholders are welcome to participate in stakeholder workshops. Presentation to the FST or Supplemental Tribal workshop(s) are not included but may be provided upon request, and would require a modification to this Scope of Work and Fee.
- Engagement early in the development of the MP offers an opportunity to anticipate the needs and concerns of affiliated Tribes, specifically the SRP-MIC and the GRIC, in addition to the identification of TCPs. We will advise the City as the project progresses if Tribal outreach affects the activities or products generated as part of the Scope of Work and will prepare a cost modification to complete the work needed to address the Tribal impacts, as requested by the City. As noted, this may include presentations to the FST or supplemental Tribal representative workshop(s).
- It is assumed that the SRP-MIC and GRIC THPOs will provide sufficient guidance and managed access to cultural experts, including Tribal members or elders (in particular) and for arranging field visits for the TCP study. Pending further guidance from them, additional time and budget may be required for additional formal presentations to Tribal committees or officials as a prerequisite for TCP research. If such services are required, then a modification of this scope of work and fee schedule will be necessary.
- TCP Research will assess possible TCPs beyond the two Preserves but, if present, only note indirect effects. Due to their variety and unique cultural significance, it is possible that TCPs outside the study area may be affected by development of park amenities. Efforts to identify and evaluate TCPs that may be present beyond the study area will be conducted with input from THPOs and cultural experts on a case-by-case basis and with the input of Tribal cultural experts.



- The study is in the traditional lands of the Akimel O’Odham and Piipaash Tribes. If a TCP pertaining to another Tribal entity or cultural group is identified, this may constitute a scope change requiring communication with that entity’s THPO (or equivalent office), an additional in-field visit with representatives from the affiliated Tribe, and further consultation on its significance.
- This scope of work includes two (2) meetings (in-person or virtual) and one (1), optional, on-site meeting with SPMIC and GRIC THPO representatives. If additional coordination meetings and/or presentations to the FST are deemed necessary, then a modification to this scope of work shall be necessary.
- Any cultural resources services not included in this scope of work that are requested by city, state, or federal agencies or THPOs to fulfill project compliance or consultation, including Tribal coordination and consultation or repatriation of curated objects, are not included in this scope. If such services are required, then a modification of this Scope of Work and Fee schedule will be required.

Logan Simpson Design Inc.
 Project Name: Tempe Preserves MP
 LSD # 22-3201
 Date: 5/19/2023
 PM: TBD

237 acres, fairly rugged terrain
 25 acres per person day
 1 FD, 2 CC
 10 sites, 10 hist strucs

Math check done by: Laura Erick Andy, Chris, Craig Rachel, Mariah, John, Tom, Andrea FD CC, Jonathon Curri Rego Johnny

Tasks	Biologist, Sr.	Principal Archaeologist, Investigator	Archaeologist IV	Archaeologist III	Archaeologist II	GIS Analyst, Associate	GIS Analyst	Subtotal Hours	Subtotal Costs	Direct Expenses					Total Labor and Exp.		
										Mileage	Jacob Butler	ASM fees	Honoraria	Lunch, In-Field Meetings		Total	
										0.625	6,000.00	2,700.000	250.000	450.000			
Task 2.1 Cultural Resources Survey																	
Coordination/permitting/meetings		3	6	2				11	\$ 1,484							\$ -	\$ 1,484
Mobization/Demobilization				2	2			4	\$ 340							\$ -	\$ 340
Background Class I			1	12		2	8	23	\$ 2,171							\$ -	\$ 2,171
Travel								0	\$ -	20						\$ 13	\$ 13
Survey				30	60			90	\$ 7,336							\$ -	\$ 7,336
Site (10) & hist structure (10) recording				24	48			72	\$ 5,869							\$ -	\$ 5,869
Draft Report			2	64	24		24	114	\$ 10,211							\$ -	\$ 10,211
QAQC		2	4	6		2		14	\$ 1,643							\$ -	\$ 1,643
Final Report				4	4		4	12	\$ 1,026							\$ -	\$ 1,026
Compliance			1		8		2	11	\$ 900			1				\$ 2,700	\$ 3,600
Subtotal Task 2 Labor	0	5	14	144	146	4	38	351	\$ 30,979	20	0	1	0	0	0	\$ 2,713	\$ 33,691
Task 2.2 Traditional Cultural Property Inventory																	
General coordination	0	4	8	8				20	\$ 2,485							\$ -	\$ 2,485
Tribal outreach (Two meetings with GRIC and SRPMIC THPOs)			24	24	24	2	8	82	\$ 8,053	200	1					\$ 6,125	\$ 14,178
TCP assess			0	24	24	4	6	58	\$ 5,015							\$ -	\$ 5,015
TCP fieldwork			20	40	40	2	2	102	\$ 9,527	200			4			\$ 1,125	\$ 10,652
TCP report		4	40	120	40	6	20	230	\$ 22,579							\$ -	\$ 22,579
Subtotal Task 3 Labor	0	8	92	216	128	12	36	492	\$ 47,659	400	1	0	4	0	0	\$ 7,250	\$ 54,909
Task 2.2 Archival Research																	
Archival research			80	40				120	\$ 14,050	100						\$ 63	\$ 14,113
Report			40	20		4	16	80	\$ 8,832							\$ -	\$ 8,832
QA QC		2	8	8				18	\$ 2,135							\$ -	\$ 2,135
Subtotal Task 4 Labor	0	2	128	68	0	4	16	218	\$ 25,017	100	0	0	0	0	0	\$ 63	\$ 25,080
Subtotal Labor Hours	0	15	234	428	274	20	90	1,061	\$ 103,655	520	1	1	4	0	0	\$ 10,025	\$ 113,680
Subtotal Labor Costs	\$0	\$2,625	\$29,982	\$40,660	\$20,487	\$2,100	\$7,800	1,061	\$ 103,654	\$ 325	\$ 6,000	\$ 2,700	\$ 1,000	\$ -	\$ -	\$ 10,025	\$ 113,679
Salary Rate	\$126.25	\$175.00	\$128.13	\$95.00	\$74.77	\$ 105.00	\$ 86.67										
									Labor	\$ 103,655							
									Expenses	\$ 10,025							
									Total Fee	\$ 113,680							



Logan Simpson Design Inc.
 Project Name: Hayden-Papago Management Plan
 LS # 22-3201
 Date: 5/19/2023
 PM: Wayne Colebank
 Math check done by:






Tasks	Principal Landscape Architect	Landscape Architect, Sr.	Landscape Architect	Landscape Designer, Assoc.	Arch/Historian	GIS Analyst, Sr.	Biologist Sr.	Biologist, Associate	Subtotal Hours	Subtotal Labor	Direct Expenses			Total Labor and Exp.	
											Mileage	Dibble	Total		
Phase 1 - Identify and Assess Natural, Cultural and Recreation Elements															
1.1 Natural Resources															
1.1.1 Geology, Topography, Soils, Drainage	4				4	24	80		112	\$ 14,620	10		\$ 6	\$ 14,626	
1.2.1.1 Flora and Fauna		42				16	145	62	265	\$ 32,812	20		\$ 13	\$ 32,825	
Subtotal	4	42	0	0	4	40	225	62	377	\$ 47,432			\$ -	\$ 47,451	
1.2 Cultural Resources															
1.2.1. Class III Survey	0								0	\$ -			\$ -	\$ -	
1.2.2 Initial Tribal Outreach and TCP Study	0								0	\$ -			\$ -	\$ -	
1.2.3 Archival and Historic Research	0								0	\$ -			\$ -	\$ -	
Subtotal	0	0	0	0	0	0	0	0	0	\$ -			\$ -	\$ -	
1.3 Recreation and Structural Resources															
1.3.1 Inventory Recreation Amenities and Use Areas	12	40	50	60	4	12			178	\$ 22,455	30		\$ 19	\$ 22,474	
1.3.2 Easements and Rights of Way	8	8							16	\$ 2,740	20	1	\$ 12,943	\$ 15,683	
Subtotal	20	48	50	60	4	12	0	0	194	\$ 25,195			\$ -	\$ 38,156	
1.4 Engage Stakeholders and City															
1.4.1 Workshops (4 total)	24	24	124	136	4		4		316	\$ 38,740	40		\$ 25	\$ 38,765	
1.4.2 DCC/HPC Presentations (2 total x 2 persons)	8	8	12		12	4			44	\$ 6,340	20		\$ 13	\$ 6,353	
Subtotal	32	32	136	136	16	4	4	0	360	\$ 45,080			\$ -	\$ 45,118	
Phase 2 - Preserve Management Goals and Success Metrics															
2.1 Preserve Management Goals and Metrics	16	24	8		8		24		80	\$ 11,700			\$ -	\$ 11,700	
Subtotal	16	24	8	0	8	0	24	0	80	\$ 11,700			\$ -	\$ 11,700	
Phase 3 - Best Management Practices for Resources															
3.1 Best Management Practices	40	40		24	12		36		152	\$ 22,430			\$ -	\$ 22,430	
Subtotal	40	40	0	24	12	0	36	0	152	\$ 22,430			\$ -	\$ 22,430	
Phase 4 - Near, Medium, and Long-Term Actions															
4.1 Near, Medium, and Long-Term Actions	12	40	16		8		8		84	\$ 12,020			\$ -	\$ 12,020	
Subtotal	12	40	16	0	8	0	8	0	84	\$ 12,020			\$ -	\$ 12,020	
Subtotal Labor	124	226	210	220	52	56	297	62	1247	163,857	140	1.00	13,017.50	\$ 176,875	
Subtotal Labor Costs	\$25,420.00	\$31,075.00	\$25,725.00	\$23,100.00	\$7,020.00	\$7,140.00	\$37,867.00	\$6,510.00	1,247	163,857	\$ 87.50	\$ 12,930.00	\$ 13,017.50	\$ 176,875	

Labor	163,857
Expenses	13,018
Total Fee	176,875

Hayden Butte and Papago Preserves Management Plan Schedule

TASKS	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14
Phase I - Identify/Assess Natural, Cultural, Recreational, and Structural Elements Present in the Preserves														
1.1 Natural Resources														
1.1.1 Geology, Topography, Soils, Drainage								◆						
1.2.1 Flora and Fauna							◆							
1.2 Cultural Resources														
1.2.1 Class III Survey							◆							
1.2.2 Intial Tribal Outreach and TCP Study													◆	
1.2.3 Archival and Historical Research							◆							
1.3 Recreation and Structural Resources														
1.3.1 Inventory Rec Amenities/Use Areas							◆							
1.3.2 Easments and Rights of Way							◆							
1.4 Engage Stakeholders and City Staff														
1.4.1 Workshops														
1.4.2 Desert Conservation Commission														
1.4.3 Historic Preservation Commission														
Phase 2 - Identify Preserve Management Goals and Success														
2.1 Preserve Management Goals/Metrics														
Phase 3 - Best Management Practices for the Resources within														
3.1 Best Management Practices														
Phase 4 - Near, Medium, and Long-Term Actions														
4.1 Near, Medium, and Long-Term Actions														

Legend:

-  = Workshop
-  = Desert Conservation and Historic Preservations Commissions Presentations
-  = Summary Report
-  = MP Submittal (Draft)
-  = MP Submittal (Final)