

CITY OF MANHATTAN CEMETERIES MASTER PLAN

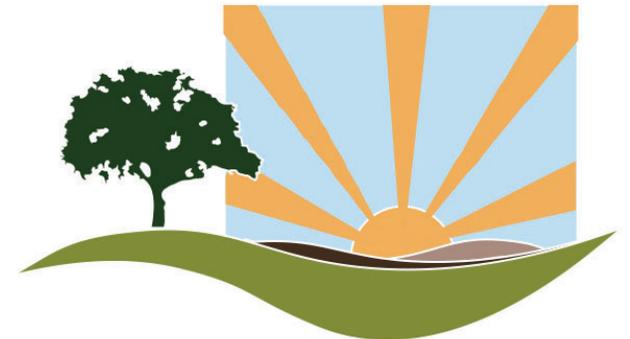


Final Draft
January 2024



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CITY OF MANHATTAN CEMETERIES

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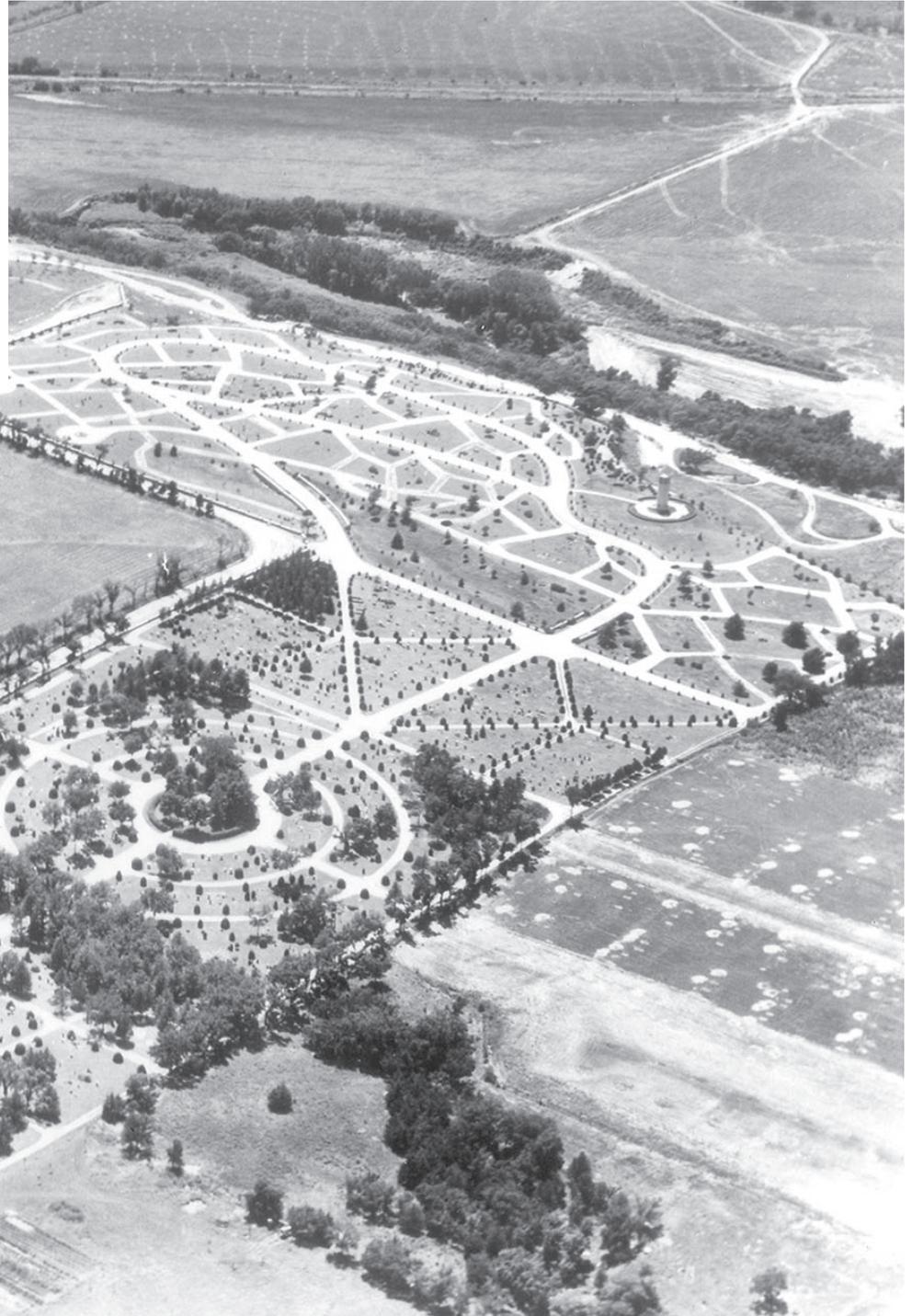


CITY OF MANHATTAN CEMETERIES

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City of Manhattan Cemeteries Master Plan Process

A cemetery master plan is a comprehensive and strategic approach to managing the long-term development of a cemetery. This plan is essential to ensure that the cemetery can continue to meet the needs of the community for generations to come. One of the key goals of the plan is to identify the current and projected maintenance needs of the cemetery, which will allow for effective planning and allocation of resources. Furthermore, the plan evaluates the existing infrastructure and services of the cemetery to identify areas for improvement or expansion. Overall, a cemetery master plan is a crucial tool in guiding the sustainable and responsible management of a cemetery.



Sunset Cemetery Aerial. Circa 1938. Credit: Riley County Historical Society & Museum

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View Facing Southwest at Sunrise Cemetery.

Chapter 1: History

SUNRISE CEMETERY

In June of 1960, the City of Manhattan purchased a combined 76 acres from two owners; Charles and Elaine Baxter, and Paul and Elsie Deam, south of city limits. The property contained a house that was constructed in 1950. In 1966, Ordinance No. 2468 was approved, officially naming both cemeteries. Section 2, Names of City-Owned Cemeteries of the ordinance states: "Hereafter the City of Manhattan, Kansas, shall own and operate two municipal cemeteries. One of these, located adjacent to Sunset Avenue shall be officially known as Sunset Cemetery. The other, located adjacent to old U.S. Highway 40 in the Stagg Hill area shall be officially known as Sunrise Cemetery."

Also at that time, the City undertook a significant construction project within the property. A maintenance shop was built to facilitate cemetery operations, and as part of the project, enhancements were made to the existing house,

transforming it into an office space. This project also constructed most of the existing streets, enhancing accessibility and convenience for visitors and staff.

In 2008, a small extension of the paved road took place to accommodate the growing demand for columbariums. The extended paved road allowed for easy access and a dedicated area for columbariums within the cemetery, catering to the specific needs and wishes of those choosing this option for memorialization. Ten years later, additional paved road was constructed for East Sunrise Drive and Center Drive.

Unfortunately, City Staff could not find additional history on the property from city records or the Riley County Historical Society archives.



Sunset Cemetery. No Date. Credit: Riley County Historical Society & Museum

SUNSET CEMETERY

The history of Sunset Hill Cemetery, later known as Sunset Cemetery, spans several significant events and transformations. In 1860, the cemetery was established on a 35-acre plot of land, providing a final resting place for the departed. However, in 1869, the City made the decision to sell 15 acres of the cemetery in order to generate funds for the construction of a stone wall, which aimed to enhance the aesthetics, define the boundaries, and keep livestock from grazing in the cemetery. This transaction allowed the City to secure the necessary resources for the project. In 1885, the City repurchased the 15 acres that had previously been sold. This action effectively returned the cemetery to its original size, ensuring its integrity and preserving its full potential for future burials.

Throughout the cemetery's history, various developments and improvements took place. In 1908, the name of the cemetery was un-officially changed from Sunset Hill to Sunset Cemetery. Expansion of the cemetery continued in 1909, with the addition of 10 more acres. In 1910, the construction of the Cemetery Sexton's house took place, providing a residence for the caretaker responsible for the maintenance and upkeep of the cemetery grounds.

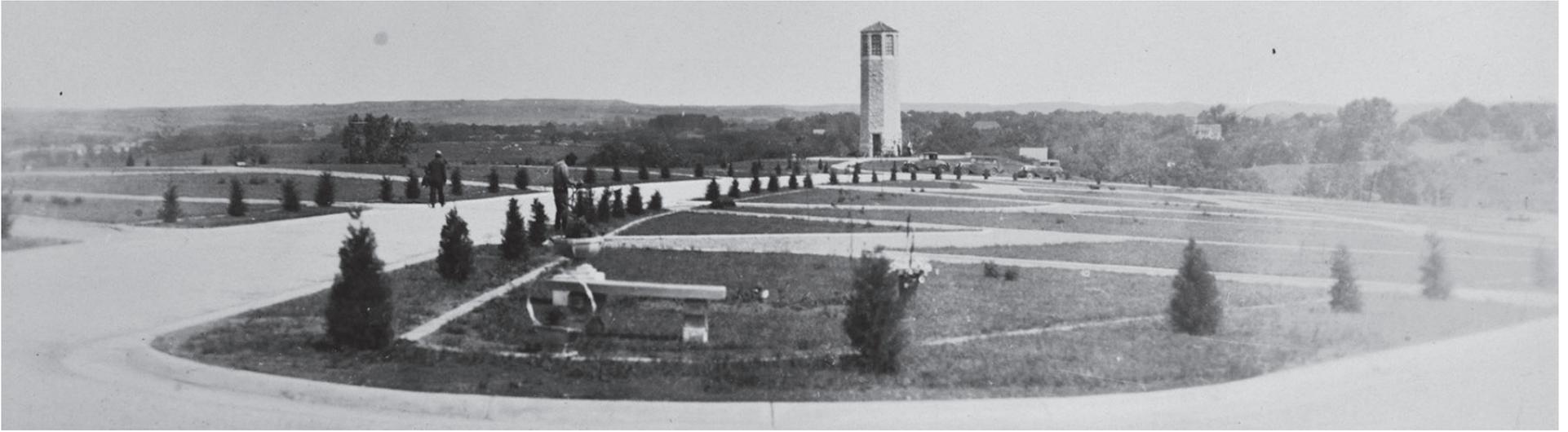
Significant landmarks were also constructed within Sunset Cemetery. In 1917, the Sunset Cemetery Memorial Gate was constructed, serving as an entrance and memorial for union soldiers who fought in the Civil War. Another notable

structure, the Paslay Tower, was built in 1931, adding a distinct and recognizable feature to the cemetery's skyline. The construction of the current stone wall surrounding the cemetery was carried out between 1932 and 1934, made possible through the efforts of the Works Progress Administration (WPA). This stone wall not only served as a boundary marker but also added a sense of permanence and structure to the cemetery's landscape.

Over the years, Sunset Cemetery underwent maintenance, repairs, and renovations to preserve its historical and cultural significance. In 1962, the Paslay Tower underwent repairs, ensuring its continued presence within the cemetery; however, a fire in 1982 left the chiming tower inoperable. In the 1990s, an asphalt road overlay was installed, improving accessibility for visitors.

Once again, the Paslay Tower underwent a renovation in 2001. This restoration work aimed to maintain its architectural integrity and preserve its role as a beloved landmark within Sunset Cemetery. The combination of these events and developments contributes to the rich and evolving history of Sunset Cemetery, making it a place of reverence, reflection, and remembrance.

This history was summarized from the Sunset Area Historic Resources Survey completed in fall 2018. For additional information, please use this link: <https://www.cityofmhk.com/2872/Historic-Surveys>.



Sunset Cemetery Singing Tower. Circa 1932. Credit: Riley County Historical Society & Museum



On Top of Paslay Tower. Circa 1932. Credit: Riley County Historical Society & Museum

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Northwest View at Sunrise Cemetery.

Chapter 2: Features, Conditions, and Operations

SUNRISE CEMETERY FEATURES AND CONDITIONS

Sunrise Cemetery is located outside the City limits and is surrounded by residential housing to the north and northwest. The neighboring properties mainly consist of rural lots with minimal development. The cemetery is mostly rolling prairie featuring steep slopes and dense, wooded ravines. The elevation varies by approximately 100 feet throughout the area. The soils are predominantly silty loam, providing good drainage. Stormwater primarily flows in a westward direction and eventually drains into the Kansas River. Regarding trees, there are approximately 200 trees within the designated plotted area, while the natural area encompasses well over 500 trees. To create a more level surface suitable for cemetery purposes, the City is currently utilizing construction debris at the lowest point of the cemetery for filling and grading.

The primary entrance to the cemetery is on the northeastern corner of the property, accessible by Stagg Hill Road. This entrance is shared with neighboring properties to the east and south. The paved roads within the cemetery were constructed during the 1960s and have been able to serve their purpose with minimal maintenance; however, there are some signs of typical wear and tear. In 2008 and 2018, additional sections of paved road were built to access the columbariums and natural burial areas. There are approximately 30 yard hydrants for irrigation throughout the plotted area of the cemetery, while the other major utilities come from the north and end at the office and maintenance shop.

Upon entering the cemetery, visitors encounter the Sunrise Cemetery office and maintenance shop situated in close proximity. Despite the lack of designated parking stalls specifically for the office, a gravel road is available, facilitating parallel parking. The office is located approximately 100 feet from this gravel area and accessed by a paved sidewalk equipped with railing and stairs.

Currently, there is no ADA parking available for the office location. There are a few parking spots to the south of the office; however, the surface is gravel and not ADA compliant. The existing shop, built in the 1960's, has low hanging garage doors that can no longer fit modern equipment.



Southwest View Toward Office.



Northeast Entry of Sunrise Cemetery.
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Northeast View Toward Office.



Northeast View Toward Maintenance Shop.



Southeast View Toward Fill Operation.



West View Along Vista Drive.



Southeast View at Natural Burial Area.

SUNSET CEMETERY FEATURES AND CONDITIONS

Located at the top of a hill, Sunset Cemetery is situated within the City limits, surrounded by residential housing and Girl Scout Park to the north. To the east and south, there are more residential areas and Manhattan High School, while a section of the cemetery's southwestern edge abuts the Sunset Zoo. On the western side, the cemetery is bordered by trails and a steep embankment leading down to Wildcat Creek. The cemetery contains gentle slopes throughout the property. The elevation change within the cemetery varies by approximately 60 feet.

The soil composition is of silty loam, offering moderate drainage. The predominant flow of drainage occurs towards the north and west directions, ultimately draining into Wildcat Creek. Approximately 30% of the cemetery is covered by trees, which can pose challenges for maintaining healthy grass growth beneath their canopy. The cemetery contains approximately 400 trees. In the 1990s, an asphalt overlay was constructed on the hard surface roads; however, the hard surface road needs complete reconstruction. An aging irrigation system is in place, featuring around 40 yard hydrants scattered throughout the cemetery grounds.

The main entrance of the cemetery is situated on the eastern edge of the cemetery, allowing access from Sunset Avenue. The cemetery itself is predominantly made of stone and features curvilinear roads along its western and southern boundaries. Within the cemetery, rectangular burial plots are found, each displaying various stylistic designs primarily located in the central and eastern sections. The cemetery is adorned with gravestones depicting motifs associated with death and the afterlife, including angels, lambs, crosses, and military symbols.

To its east and south sides, the cemetery is enclosed by a stone wall constructed in 1934. The main gate, also made of stone, was erected in 1917 as a tribute to union soldiers who served during the Civil War. Additionally, three stone bridges were built in 1934 as part of the relief efforts during the WPA era, along with a stone bandstand featuring a flagpole. Adjacent to the cemetery is the Sexton's house, constructed in 1910 through contributions from the public and the City. This stone cottage is located on the eastern side, across Sunset Avenue. Immediately north of the Sexton's house is the existing maintenance shop for the cemetery.



Sunset Cemetery Entry Monument.
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Sunset Cemetery Sexton's House Viewing Northwest.



Northwest View Along WPA Stone Fence.



Southwest View Toward Canon Monument.



Northwest View Toward WPA Bridge.



North View Toward Existing Public Works Structures.



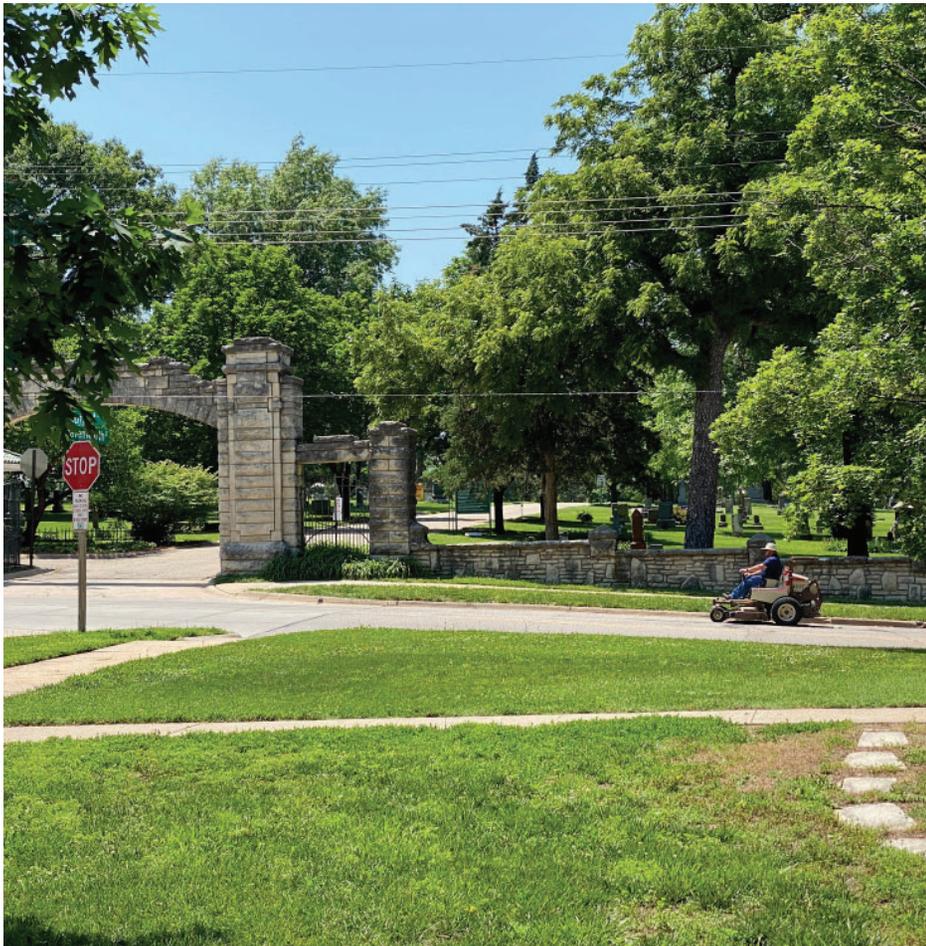
North View Toward Girl Scout Park.



East View Along Main Road.

SUNRISE AND SUNSET CEMETERY OPERATIONS

Cemetery Staff not only carries out an average of 99 interments per year but also performs various operational tasks to ensure the cemetery grounds are well-maintained throughout the seasons. From March to October, their focus lies on mowing and trimming the grass, ensuring a neat and well-kept appearance. In November, their attention shifts towards trimming shrubs and ornamental grasses, ensuring these features are pruned and maintained. As winter sets in from November to February, the staff dedicates their efforts to the collection and removal of fallen leaves, maintaining a clean and organized environment. It's important to note that interments and maintenance of buildings and mowers take place year-round, demonstrating the ongoing nature of the cemetery's operations.



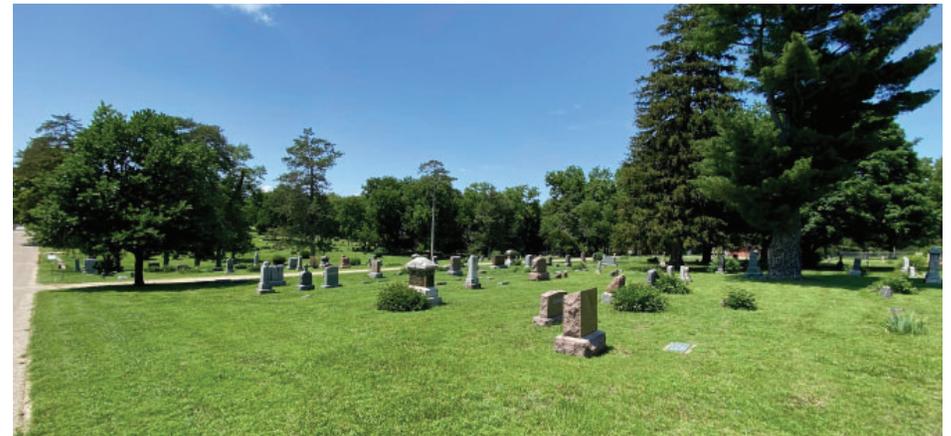
West View from Sexton's House Toward Sunset Cemetery Entrance.
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North View from Sexton's House Toward Maintenance Shop.



North View Toward Shop and Office in Sunrise Cemetery.



Northwest View from Main Road in Sunset Cemetery.

BURIAL CAPACITY

SUNRISE CEMETERY

The current plotted area of Sunrise Cemetery spans 17 acres and has approximately 12,000 burial spaces. Out of these burial spaces, around 50% have already been sold. Considering the average annual need for 79 burials, there are approximately 75 years' worth of burial spaces in the plotted area.

Moreover, there remains 20 acres of land within the cemetery that is yet to be plotted and developed. Based on an industry standard of 620 spaces per acre, this equates to approximately 12,400 additional spaces that can be created. Utilizing the average annual need of 79 burials, it is estimated that these undeveloped spaces can accommodate approximately 156 years' worth of future interments.

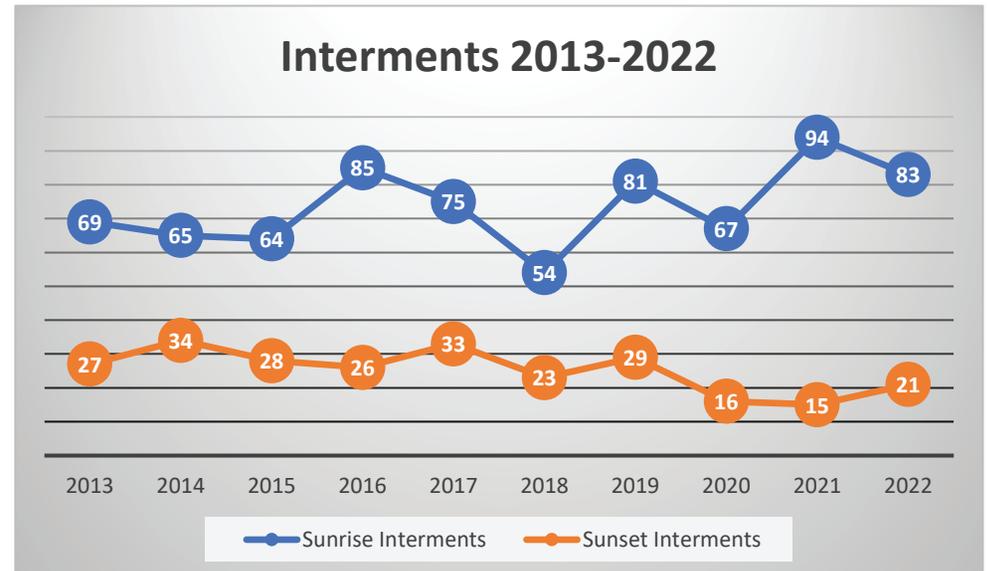
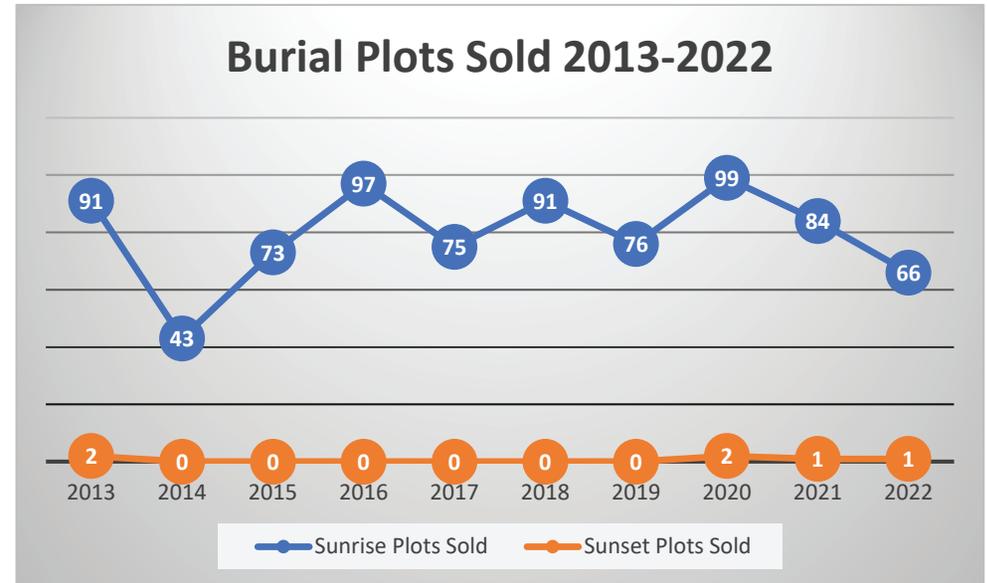
When combining the already plotted spaces and the potential spaces from the undeveloped area, Sunrise Cemetery has the capacity to meet the interment needs of the community for over 200 years. This substantial capacity ensures that the cemetery can serve the community for generations to come.

SUNSET CEMETERY

There are approximately 19,000 burial spaces at Sunset Cemetery. Out of these spaces, approximately 13,000 have already been used for interment. At present, there are no vacant spaces remaining for sale. However, in rare instances, it is possible for spaces to be sold back to the City, although this occurrence is infrequent.



Southwest View Toward Undeveloped Space in Sunrise Cemetery



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Open House at Sunset Zoo Exploration Center on March 9, 2023.

Chapter 3: Concept Development

PUBLIC ENGAGEMENT PROCESS

City Administration proposed a master planning effort for Sunset and Sunrise Cemeteries at a City Commission Work Session on November 8, 2022. The City Commission agreed that a master planning effort was necessary, and the process should assess current cemetery facilities and operations. The master plan would also provide recommendations for ongoing development and management of both cemeteries including physical assets, policies, and financial strategies.

The master planning process began in January 2023. City Staff actively engaged with stakeholders through various avenues as part of the master planning effort for Sunset and Sunrise Cemeteries. They held multiple meetings with the Cemetery Board, indicating a continued dialogue and collaboration. Toward the end of January, a tour of the Sunset Cemetery Sexton's House

was provided to the Landmark Water Tower Neighborhood and Manhattan/Riley County Preservation Alliance. Additionally, City Staff provided an update on the planning effort to the Historic Resources Board in January & July and the Parks and Recreation Advisory Board in February to gather input and expertise.

In March 2023, City Staff utilized KMAN radio to promote an Open House engagement with the community at the Sunset Zoo Exploration Center. This event aimed to provide an opportunity for the community to review and provide feedback on the latest designs of the master plan. This Open House was also advertised in the Manhattan Mercury and the City's social media platforms. Approximately 10 members of the community attended the Open House. The final approval of the master plan is anticipated to be presented to the City Commission in November 2023.

FEEDBACK FROM THE COMMUNITY

SUNRISE CEMETERY

City Staff presented two options to the Cemetery Board for their consideration. The first option involved keeping the shop and office in their current location, while the second option proposed a new location approximately 1,700 feet south of the existing one. After reviewing the options, most of the board members recommended keeping the shop and office in the same location.

The Cemetery Board agreed with the recommendation to screen the maintenance shop with vegetation. They also agreed that this would be a beneficial addition to the cemetery's aesthetics. Furthermore, the board members liked the idea of creating some distance between the proposed shop and office, as it could potentially improve the overall layout and functionality of the facilities.

However, a significant factor that influenced the recommendation to keep the shop and office in the same general area was the cost associated with relocating utilities. The board recognized that if they were to choose the second option, water, wastewater, gas, and electric utilities would need to be extended approximately 1,700 feet to reach the new location. The estimated cost for extending these utilities was calculated to be around \$30-\$50 per linear foot per utility. Based on this estimation, the total cost for extending utilities further into the property could range from approximately \$200,000 to \$350,000.

Considering the financial implications of relocating utilities, the board members deemed it more cost-effective to keep the shop and office in their current location. By doing so, they could avoid the substantial expenses associated with extending utilities over such a considerable distance.

In summary, the staff presented two options for the Cemetery Board's consideration regarding the shop and office at Sunrise Cemetery. Most of the board members recommended keeping the facilities in their current location, considering the advantages of screening the shop with vegetation, and creating space between the shop and office. The cost of relocating utilities, estimated to be between \$200,000 and \$350,000, played a significant role in their decision-making process.

Limited feedback was received from the community or other advisory boards regarding this matter. However, a community member requested that the City consider preserving the existing office at Sunrise Cemetery.



Southeast View Toward Natural Burial in Sunrise Cemetery.



Northwest View Toward Lot E in Sunrise Cemetery.

Sunrise Cemetery: Office and Maintenance Shop Locations



SUNSET CEMETERY

During the review process, City Staff worked closely with the Cemetery Board to explore potential locations for the relocation of the maintenance shop. Two primary options were presented for consideration. Option 1 suggested placing the new shop within Girl Scout Park, situated on the northeastern border of the cemetery. Option 2 proposed a location immediately west of the Paslay Tower, near the western edge of the cemetery. Additionally, a third option emerged during discussions, which involved keeping the existing maintenance shop lot but constructing a new shop on the same property.

Option 1, despite its initial proposal, faced potential conflicts. This option required the concurrence of the Parks and Recreation Advisory Board (PRAB). When Option 1 was presented to the PRAB in February 2023, it was not well received. As a result, the idea of placing the new shop within Girl Scout Park was less desirable; however, this option was still taken to the City Commission for their feedback and consideration.

Option 2, on the other hand, showed promise and garnered substantial interest; however, the Cemetery Board became divided during the discussions surrounding this option, leading to extensive deliberations. It was during these discussions that the possibility of building the new shop on the existing lot was raised. Recognizing the importance of thoroughly exploring this option, City Staff agreed to conduct a feasibility study of the current property.

After conducting the feasibility study, City Staff later determined that the existing lot could indeed be a viable location for the new shop; however, to comply with the Manhattan Development Code (MDC), it would be necessary to relocate access drives.

Consequently, following the feasibility study and the assessment of the potential options, the Cemetery Board narrowed down their choices to two preferred alternatives: keeping the shop on the existing lot or moving it to the west side of the cemetery. These two options were deemed the most viable and feasible solutions for the relocation of the maintenance shop.

Significant feedback was received from the community during the public engagement process. The Landmark Water Tower Neighborhood actively participated in the master plan discussions. Among the concerns was the potential narrowness of the entrance on Sunset Lane, which might pose challenges in accommodating increased traffic from keeping the sunset shop on the existing lot. Additionally, some neighbors expressed the importance of ensuring

that the new shop on the existing lot blends aesthetically with the neighborhood. Also, neighbors to the north of the Sunset Cemetery were concerned about the noise and disturbance to the Cemetery that option 2 would create. Lastly, the Manhattan/Riley County Preservation Alliance played a role in the master plan process, advocating for the inclusion of the Sexton's house on the national historic register. Their focus was on preserving the historical significance of the property.

After visiting multiple advisory boards and engaging stakeholders, City Staff prepared four scenarios for the City Commission to consider at the June 27, 2023 Work Session. In Scenario 1, a new shop was proposed on the western edge of Sunset Cemetery. Scenario 2 suggested a new shop in collaboration with the Sunset Zoo on the far southwest corner of Sunset Cemetery. In Scenario 3, the shop was proposed on the northern edge of Sunset Cemetery in Girl Scout Park. Lastly, Scenario 4 recommended retaining the existing lot but proposed a new maintenance shop.

During the June 2023 Work Session with the City Commission, clear feedback was provided, leading to their recommendation for staff to further explore scenarios 2 and 4. The discussion also prominently featured the Cemetery Sexton's House.

The Cemetery Sexton's House is no longer in official use by the City since the Cemetery Sexton vacated the property in 2018. According to the deed, if the property is not utilized as the Cemetery Sexton's house, it should revert to the grantors; however, it's important to note that the grantors are no longer alive, and the deed does not specify that the property should go to the heirs of the grantors in such a scenario.

At that time, most of the City Commission was in favor of selling both the existing Sunset Cemetery maintenance lot and the Cemetery Sexton's House. To sell the Sexton's House, the City would need further research to explore the options in more detail, including legal, historical, and title research. This process could take multiple years to accomplish.

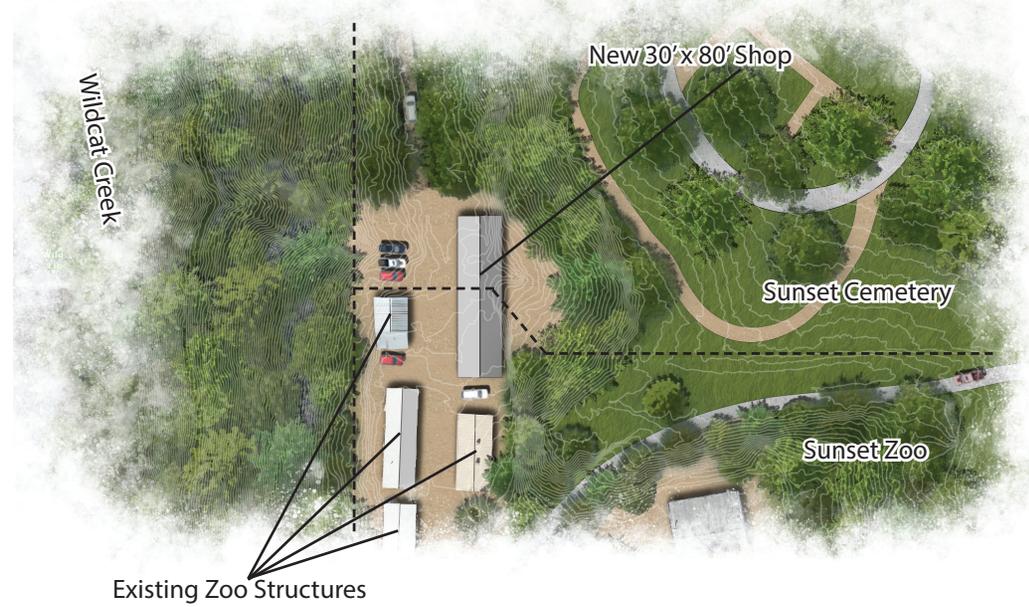
There are no deed restrictions on selling the maintenance lot, but it's crucial to acknowledge that some utilities must be relocated before the lot's sale. Notably, a 10" public water main runs across the lot from the northwest to the southeast.

Sunset Cemetery: Four Scenarios for City Commission Consideration

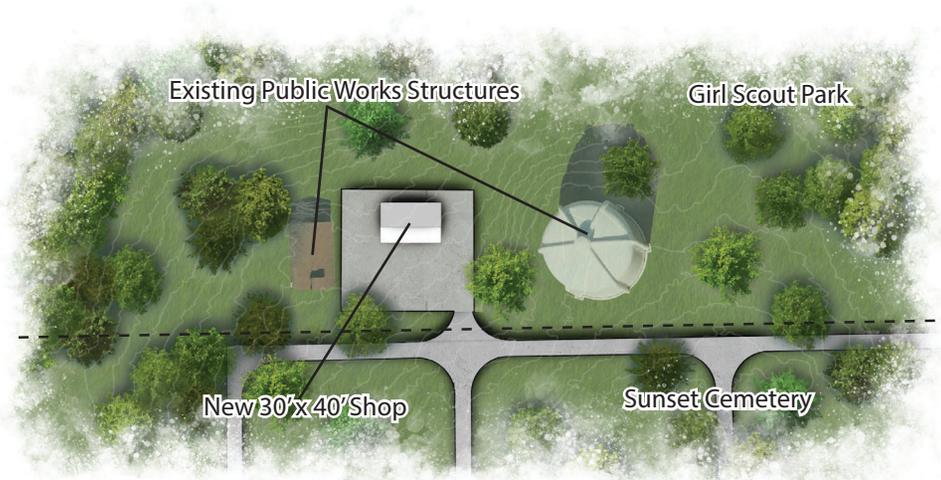
Scenario 1



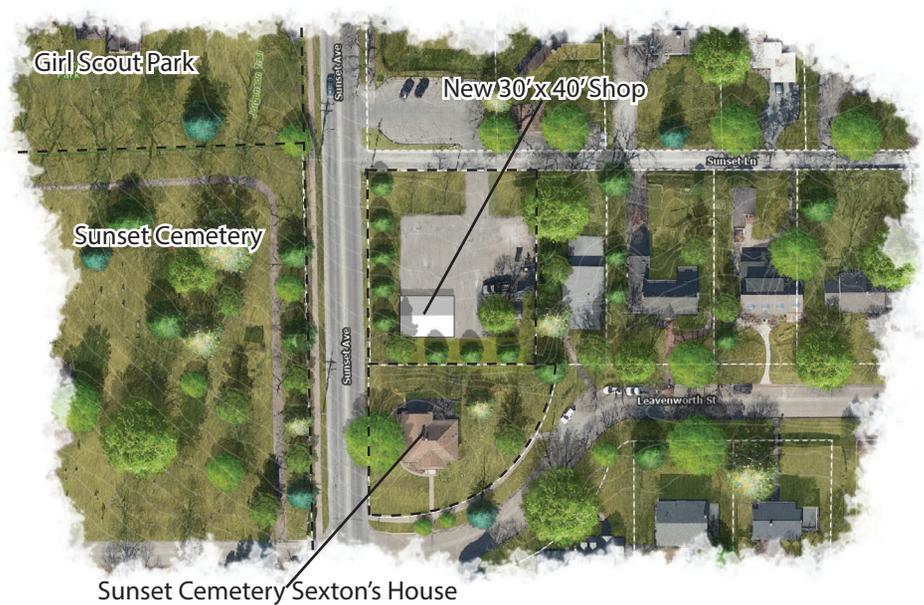
Scenario 2



Scenario 3



Scenario 4



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Chapter 4: Proposed Concepts

The Manhattan Cemeteries Master Plan has undergone a comprehensive public process, involving active participation and feedback from community members, stakeholders, advisory boards, and the City Commission.

SUNRISE CEMETERY CONCEPT OBJECTIVES

One of the objectives of the plan is to prioritize the construction of a new ADA accessible office to improve accessibility for visitors and staff. Additionally, the plan aims to visually screen the shop area with vegetation and renovate the existing shop while constructing additional shop space to support cemetery operations. The plan will also determine the phasing for lot development and road construction to ensure efficient use of available space and resources. Overall, the cemetery master plan seeks to enhance the cemetery's aesthetic appeal, functionality, and accessibility while ensuring sustainable and responsible management practices.

SUNSET CEMETERY CONCEPT OBJECTIVES

One of the key objectives of a cemetery master plan is to prioritize the construction of a new shop facility to support cemetery operations. The plan also includes determining the location of the new shop facility to ensure it is optimally situated to support cemetery functions. Additionally, the cemetery master plan aims to assess whether the Cemetery Sexton's house can be sold and if so, how best to manage its sale. Another objective is to install Columbariums south of Paslay Tower and in block nine to expand burial options for cremated remains. The plan also addresses infrastructure improvements such as the reconstruction of cemetery roads, installation of an ADA accessible sidewalk at the entry, and addressing settling of the memorial arch to enhance accessibility and safety for visitors and staff. Overall, the cemetery master plan seeks to ensure sustainable, responsible, and efficient management of the cemetery while enhancing its aesthetic appeal, functionality, and accessibility for all.

SUNRISE CEMETERY

CEMETERY EXPANSION

Currently, approximately 50% of Sunrise Cemetery has been developed, resulting in around 12,000 spaces that have been plotted. Of these plotted spaces, about half have already been sold. As the remaining spaces are gradually sold over the next few decades, it would be necessary to expand and plot new burial areas to meet future demand. The next phase of development, known as K Lot, is planned to be plotted south of the existing columbariums. Additionally, there are approximately seven other phases that require development. Following an industry standard of 620 burial spaces per acre, the remaining area can accommodate approximately 12,400 burial spaces. In total, Sunrise Cemetery has enough space to accommodate the community's burial needs for approximately 200 years.

Sunrise Cemetery is situated atop a cluster of hills, and constructing new lots in certain areas will require a significant amount of construction fill. Construction fill refers to materials such as soil, sand, gravel, crushed stone, or other inert substances that are used to level or fill uneven or excavated areas. Currently, there are ongoing filling operations in the lower elevations of the property. The construction fill is sourced from multiple City construction projects that utilize the site as a disposal area for inert materials.

In 2018, a local engineering consultant provided the City with a grading plan for the future expansion of the remaining sections of Sunrise Cemetery. According to the plan, most of the fill will be placed in the western portion of the area. While the available construction fill and inert material are suitable for raising the elevation of the cemetery to a certain extent, once the elevation gets within 6 feet of the desired grade, the material needs to be finer and conducive to easy excavation. Additionally, the top 8 to 6 inches of soil should consist of topsoil, allowing for the growth of grass and vegetation.

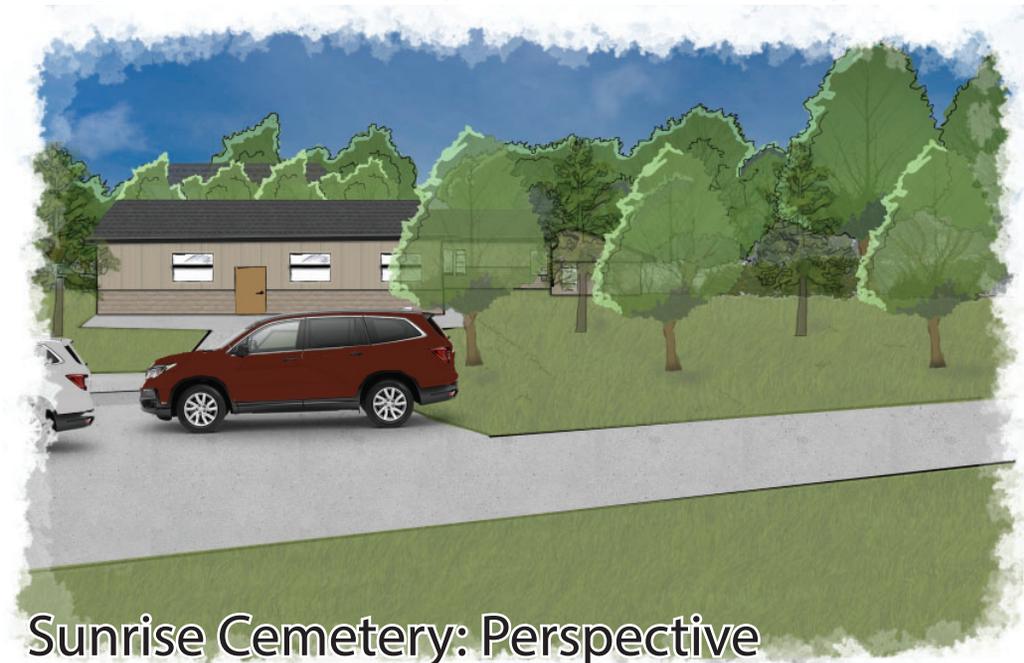
NEW OFFICE

The master plan is proposing the creation of an ADA accessible office to serve as a reception area for community members meeting with the Cemetery Sexton. The current office lacks ADA accessibility and is over 60 years old, with outdated features. Originally a remodeled house, it no longer meets the necessary standards and staff needs.

The new office design aims to address these issues and provide improved functionality. It would include a research room, safe room, conference room, two offices, and an ADA accessible restroom. Additionally, parking would be enhanced, with approximately 10 parking spaces, including designated ADA parking spots, conveniently located near the office.

The proposed office would be a rectangular building measuring 30' x 40'. To ensure better separation, the plan proposes placing the new office 75 feet further northeast of the maintenance shop area. This relocation would create a more distinct division between the office and the maintenance facilities. In order to further enhance the visual appeal and privacy of the office, the plan suggests incorporating a vegetative barrier between the office and the maintenance area. Trees would be strategically planted to create a screen, effectively concealing the maintenance shops while adding a natural and aesthetically pleasing element to the surroundings.

Overall, the proposed ADA accessible office would not only address the current shortcomings of the existing office but also provide an improved and welcoming environment for community members visiting the Cemetery Sexton.



Sunrise Cemetery: Perspective

REMODEL OF EXISTING MAINTENANCE SHOP

The master plan recommends renovating the existing maintenance shop, as the overall structure appears to be structurally sound; however, it is evident that the interior of the shop requires upgrades due to its age, having been constructed in the 1960s. Currently equipped with two garage doors, the remodeled shop would feature three garage doors to enhance functionality and accessibility. Additionally, a connection would be established on the north-eastern edge of the shop, linking it to the proposed new maintenance shop.

The renovated shop would primarily serve as a dedicated space for housing smaller machinery and vehicles. This would ensure a more organized and efficient workflow for maintenance operations, accommodating the specific needs of the equipment and vehicles utilized in the cemetery. By implementing these remodeling plans, the aim is to rejuvenate the interior of the maintenance shop, bringing it up to modern standards while optimizing its functionality and suitability for housing the necessary machinery and vehicles.

NEW MAINTENANCE SHOP

In addition to the renovations, the master plan proposes the construction of a new maintenance shop on the site where the existing office currently stands. The new maintenance shop would span an area of 40' x 80'. Considering the substantial number of burial spaces remaining at Sunrise, this investment in modern maintenance facilities would greatly contribute to the long-term

support and upkeep of the cemetery. The new maintenance shop would feature four garage doors, one of which would be designed with enough height to accommodate larger machinery. This addition is important as it would allow the protection and storage of the bigger machinery and vehicles that are currently exposed to the elements.

By providing a dedicated space for the larger machinery and vehicles, the new shop aims to improve maintenance operations while safeguarding the equipment from environmental conditions. This would contribute to the longevity and efficient functioning of the machinery, reducing the need for repairs or replacement.

Overall, the construction of the new maintenance shop is a strategic investment that aligns with the goal of ensuring the preservation and proper maintenance of Sunrise Cemetery. It would enhance the capabilities of the cemetery's maintenance team, ultimately benefiting the overall management and care of the burial grounds.

TREES AND IRRIGATION

As the cemetery expands, consideration needs to be given to shade and water. Currently, there is no formal tree planting plan or irrigation plan in place at Sunrise Cemetery. When developing new lots, attention should be paid to the



Sunrise Cemetery: Proposed Layout Section

placement of trees and water lines. Balancing the amount of shade is essential, as excessive shade can inhibit grass growth, while inadequate shade can lead to overheating of understory vegetation.

To address these concerns, a well-designed tree planting plan should be implemented. This plan should determine the appropriate tree species, their placement, and the spacing between them to achieve the desired level of shade without hindering grass and other groundcover growth. Additionally, an irrigation plan should be developed to ensure sufficient water supply for newly planted trees and overall landscaping needs.

By carefully considering tree and water line placement during the development of new lots, the cemetery can create an environment that supports healthy vegetation growth. This approach would contribute to the overall aesthetic appeal and sustainability of the expanding cemetery.

NATURAL BURIAL

Sunrise Cemetery has recently approved natural burial as an option for interment. The designated area for natural burials is located on the eastern edge of the property. If the demand for natural burial spaces continues, there is potential for expansion to the south along the property edge.

Natural burial, also referred to as green burial or eco-friendly burial, is an environmentally conscious approach to laying the deceased to rest while minimizing ecological impact. It serves as an alternative to conventional burial methods that involve embalming, metal caskets, and concrete vaults. In a natural burial, the body is laid to rest in a biodegradable container or shroud, allowing for natural decomposition and integration with the earth. This practice avoids the use of toxic embalming fluids and instead relies on natural substances like essential oils or non-toxic preservatives for body preparation.

By embracing natural burial practices, Sunrise Cemetery acknowledges the importance of environmental sustainability and offers individuals an eco-friendlier option for their final resting place.

COLUMBARIUMS

At present, there are 144 lots for columbariums at Sunrise Cemetery. Each of these lots has the capacity to accommodate up to four urns. Potential space for future expansion has been identified near the existing columbarium area in case the need arises.

Columbariums are structures or rooms designed specifically for the storage and display of cremated remains, also known as cremains. They are a common feature in cemeteries, funeral homes, and memorial parks. Columbariums typically consist of a series of niches or compartments, often made of stone, marble, or concrete, arranged in a wall or freestanding structure. Each niche is intended to hold an urn containing the cremated remains of an individual. The niches may be sealed with a plaque or other personalized memorialization to honor the deceased.

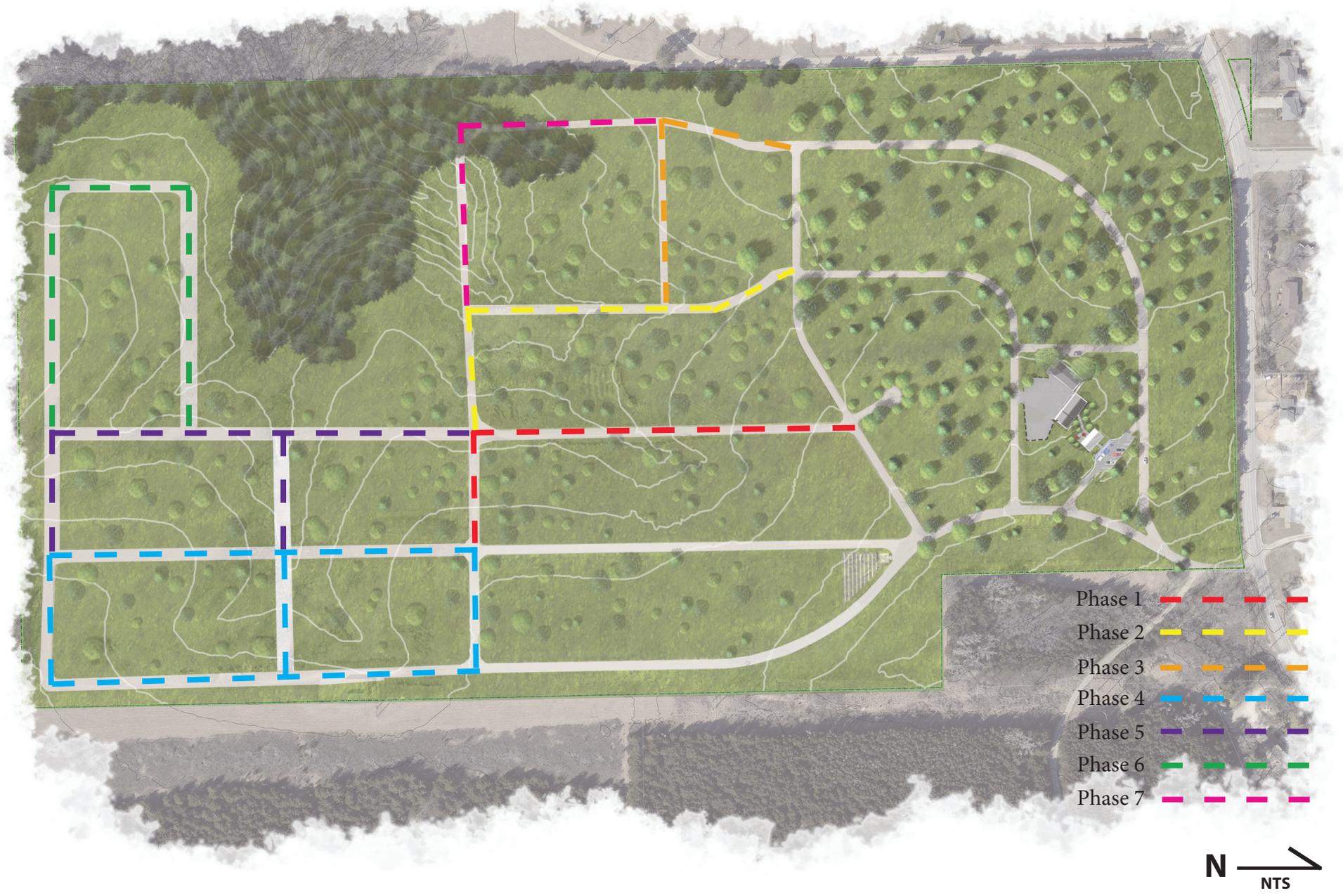
Columbariums provide a dedicated and respectful space for families to place the cremated remains of their loved ones. They offer a more compact and efficient alternative to traditional burial plots and can accommodate multiple urns within a relatively small area. The design and layout of columbariums can vary widely, ranging from simple and utilitarian structures to ornate and decorative constructions. Some columbariums are located indoors, while others are situated outdoors, often in tranquil garden settings or mausoleums.

By providing a centralized location for the storage and remembrance of cremated remains, columbariums offer families a convenient and enduring place to visit and pay tribute to their loved ones.

ROADS

Most of the roads within Sunrise Cemetery were constructed in 1966, with a small addition in 2008 and further expansion in 2018. While the roads built in 1966 are still functioning as intended, signs of wear and tear have started to emerge. As areas that show deterioration are identified, they should be addressed accordingly; however, a phasing plan to replace the aging roads in Sunrise Cemetery once the roads in Sunset Cemetery have been addressed. A Pavement Condition Index is recommended for the roads.

Sunrise Cemetery: Future Road Construction and Phasing



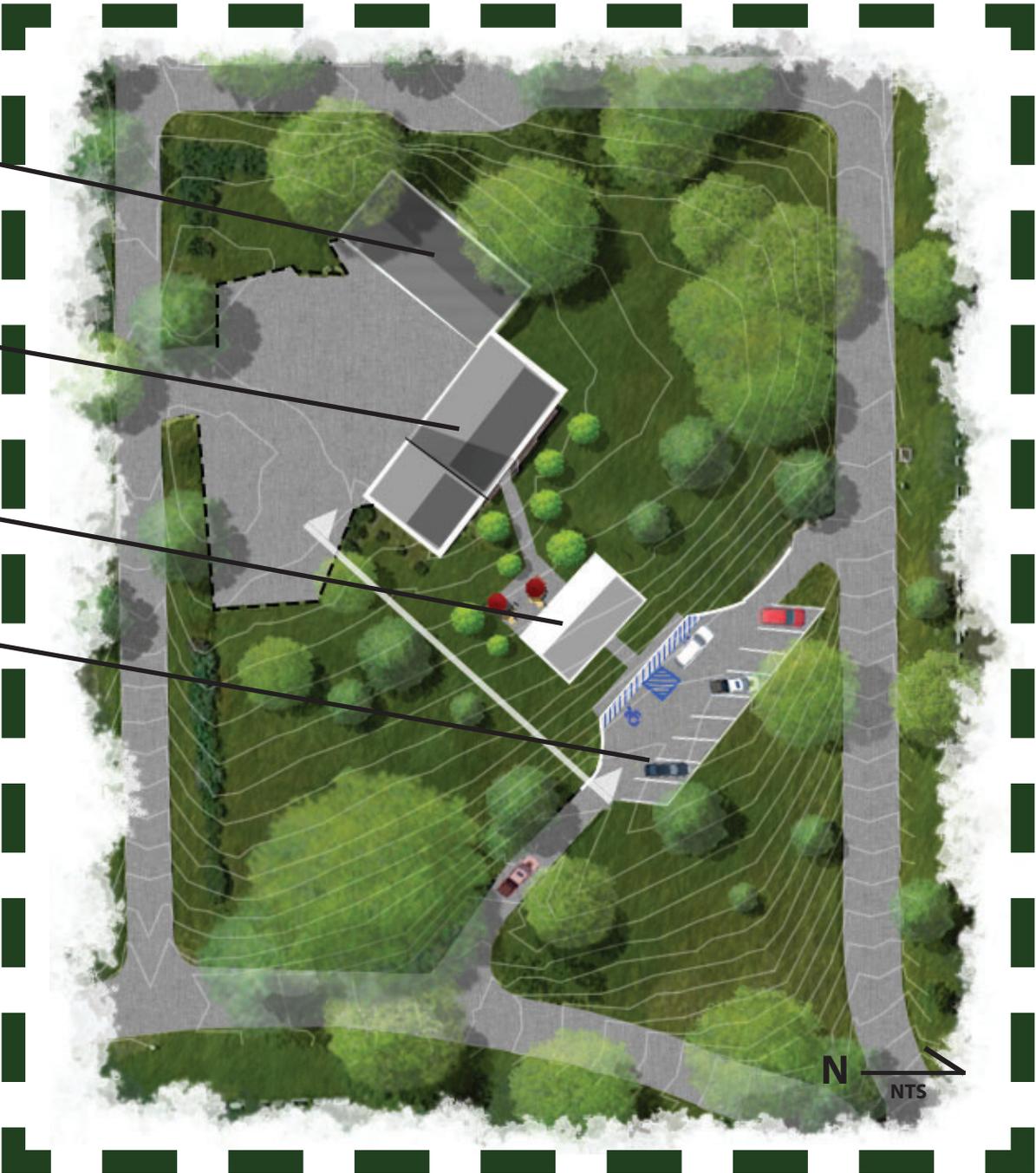
Sunrise Cemetery: Enlarged Layout Plan

Remodeled Shop

New 40' x 80' Shop

New 30' x 40' Office

New 11 Space Parking



Sunrise Cemetery: Proposed Final Concept



Future Columbariums

Existing Columbariums

Future Natural Burial

Existing Natural Burial



Sunset Cemetery: Final Concept



SUNSET CEMETERY

CEMETERY EXPANSION

Sunset Cemetery spans 45 acres and has reached full development since its establishment in the 1860s. No further burial spaces can be created within the cemetery. Although all spaces have been sold, not all have been filled yet, with approximately 70% of the cemetery utilized for interment. It is essential to preserve certain historic features within the cemetery, including the monument entry and carriage house, the WPA walls, the WPA bridges, and the Paslay Tower.

TREES AND WATER

The current state of the cemetery lacks a comprehensive planting plan and irrigation plan, posing challenges for tree placement. The presence of older trees inhibits the growth of younger ones by restricting light and resources. Whenever an older tree is removed, creating an opportunity for sufficient light exposure, a new tree is planted in that area. However, this approach does not address the overall need for strategic tree placement throughout the cemetery. An assessment of the existing trees is recommended before a tree replacement plan is finalized.

Furthermore, the existing irrigation network is deteriorating and requires replacement. This issue compromises the efficient delivery of water to trees and vegetation, leading to inadequate hydration and potential damage to the overall landscape. To ensure the vitality and sustainability of the cemetery's greenery, a well-designed planting plan should be established, identifying suitable areas for tree growth while considering the compatibility of different species.

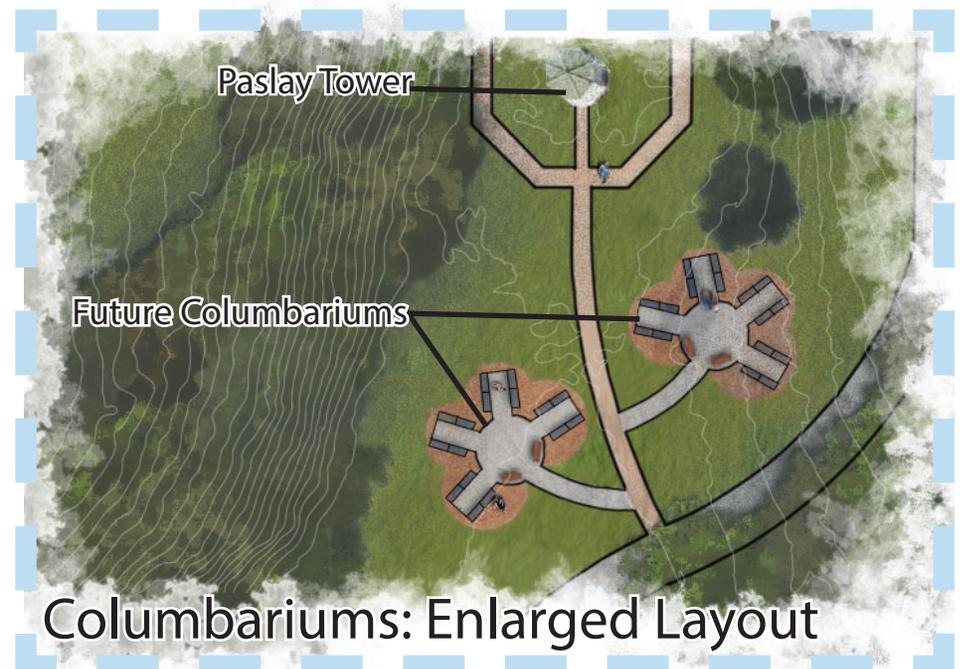
Simultaneously, the installation of a new irrigation network is essential to provide adequate water supply to the planted trees. By implementing a well-designed planting plan and addressing the irrigation network's shortcomings, the cemetery can enhance its aesthetic appeal, promote healthy tree growth, and preserve its natural beauty for future generations to appreciate.

COLUMBARIUMS

The introduction of columbariums presents a potential for expansion and enhancement within Sunset Cemetery. One proposed location for columbariums is south of Paslay Tower, providing a convenient and accessible area for visitors. Additionally, an area of interest for columbarium placement is block 9, situated just northeast of the veteran's crosses. While this area already contains some trees, there is ample space to accommodate additional columbariums, offering more options for families.

The City Staff believes that the inclusion of these columbariums would be widely embraced by the community. To ensure the perpetual care and maintenance of the columbariums within Sunset Cemetery, a portion of the proceeds generated from the sale of columbarium niches would be allocated to a dedicated perpetual care fund. This fund will serve to effectively preserve and upkeep the columbariums, ensuring their longevity and providing a lasting tribute for families who choose this option for their loved ones.

By strategically incorporating columbariums in these designated areas, Sunset Cemetery can meet the evolving needs and preferences of individuals and families, while also generating resources to support the ongoing care and upkeep of these meaningful spaces.



Columbariums: Enlarged Layout



Columbariums Perspective

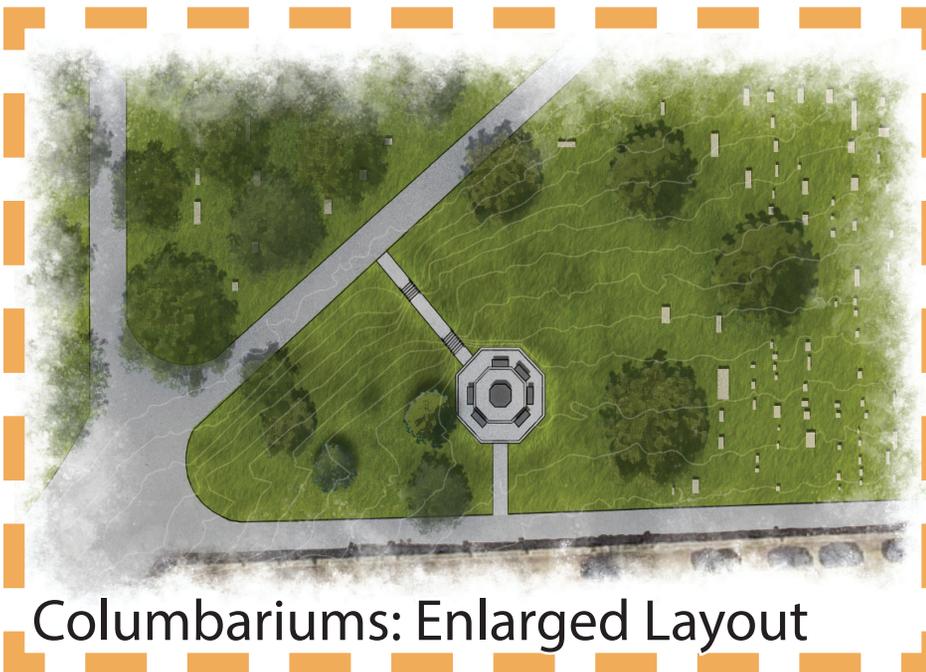
ROADS

The asphalt overlay in Sunset Cemetery, which was applied in the early 1990s, is deteriorating significantly. Therefore, it is crucial to prioritize the replacement of these deteriorating roads before considering any road replacements at Sunrise Cemetery.

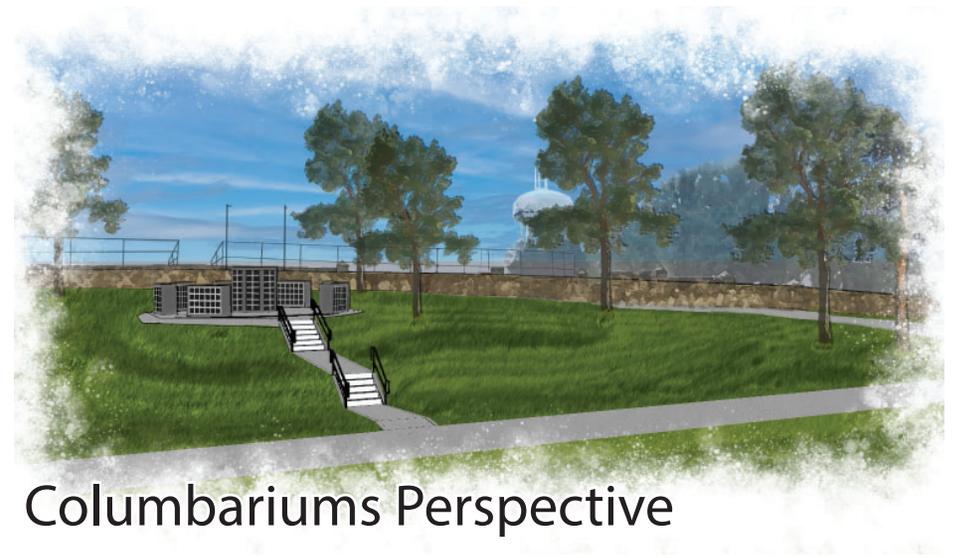
To accurately assess the condition of the roads at Sunset Cemetery and determine the most appropriate course of action, it is recommended to conduct a Pavement Condition Index (PCI) evaluation. This assessment will provide a comprehensive analysis of the road surfaces, identifying areas that require immediate attention and highlighting the overall condition of the pavement network.

By conducting a PCI evaluation, the cemetery management can make informed decisions regarding the extent of road replacement and prioritize areas that are in dire need of repair. This approach will ensure that limited resources are allocated efficiently and effectively, targeting the roads that pose the greatest risk and ensuring the longevity and safety of the cemetery's transportation infrastructure.

Addressing the road issues promptly through comprehensive replacement measures, guided by the findings of a thorough PCI evaluation, will enhance the overall accessibility, safety, and aesthetics of Sunset Cemetery, offering visitors a more pleasant and secure experience as they navigate the grounds.



Columbariums: Enlarged Layout



Columbariums Perspective

Sunset Cemetery: Road Reconstruction and Phasing





Joint Maintenance Shop Perspective

JOINT MAINTENANCE SHOP

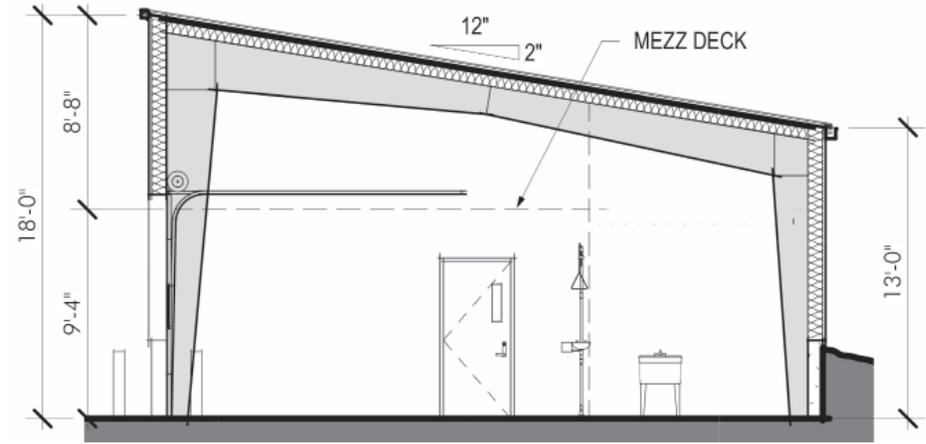
The master plan is recommending a joint maintenance shop be located on the southwest corner of the cemetery, in collaboration with the Sunset Zoo. Having a joint maintenance shop offers several benefits that contribute to the safety and efficiency of City Staff in the management of the cemetery and zoo divisions:

1. Enhanced Resource Sharing:

By sharing a maintenance shop, both the cemetery and zoo divisions can effectively pool their resources and equipment, reducing redundancy and ensuring that machinery is well-maintained and readily available for both divisions. This collaborative approach enhances operational efficiency and minimizes downtime as the same equipment can serve various purposes as needed.

2. Improved Safety and Training Facilities:

The existing cemetery maintenance shop, situated across a busy street with substantial traffic, raises concerns regarding employee safety. Building a joint maintenance shop allows for the selection of a safer location accessible to employees from both divisions, reducing the risk of accidents during transportation. Furthermore, this modern facility adheres to current safety regulations and standards, promoting the overall well-being of the workforce. Lastly, the shared break room offers computer access for administrative and training purposes.



Joint Maintenance Shop Section

3. Space Optimization:

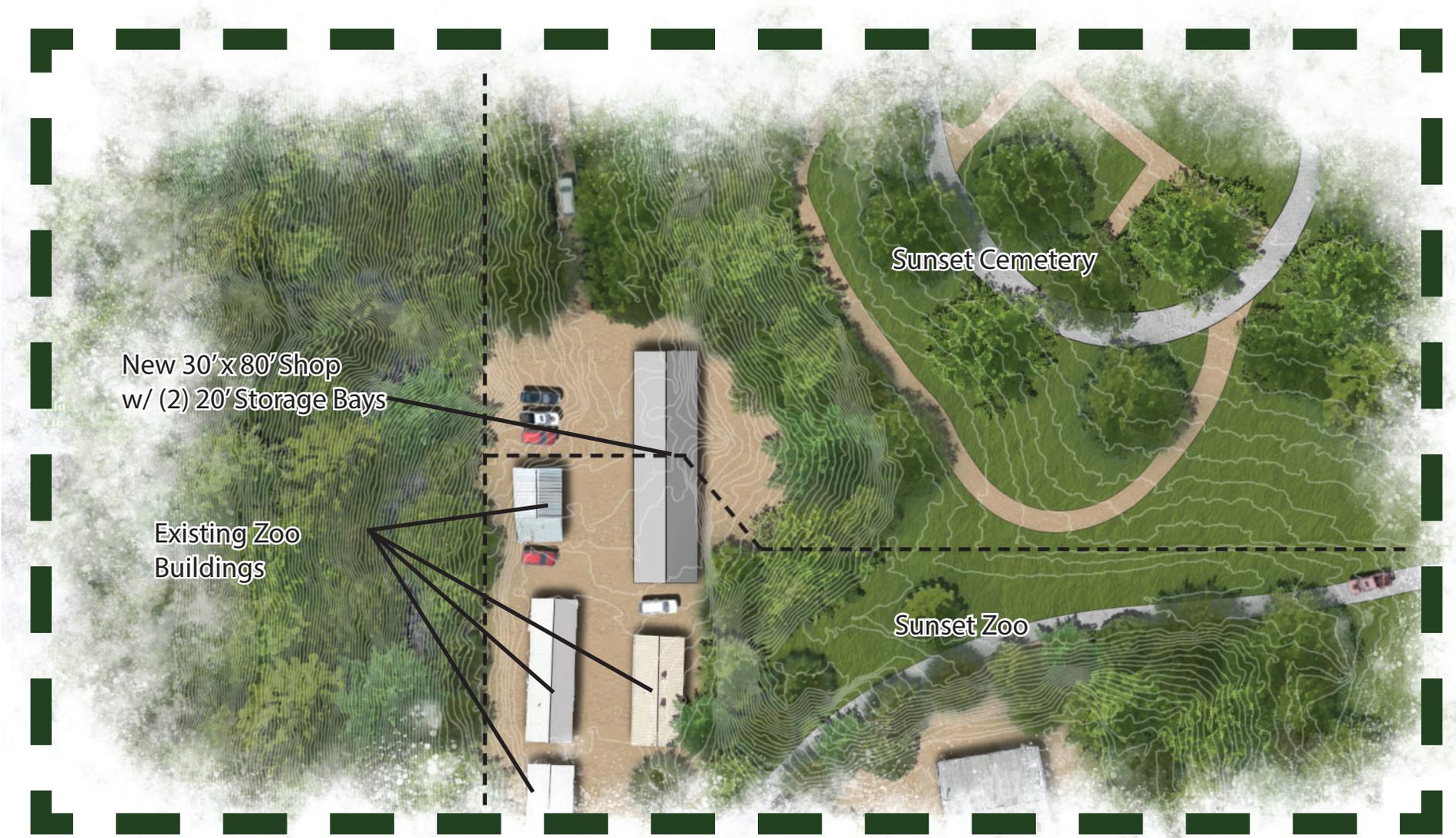
The zoo division requires additional space for maintenance purposes due to the continuous expansion of exhibits funded in part by private dollars. A joint maintenance shop can optimize the use of available land, efficiently accommodating the needs of both divisions. This approach maximizes land use and minimizes the environmental impact, contributing to a more organized and efficient overall infrastructure for the Parks and Recreation Department.

CEMETERY SEXTON'S HOUSE AND EXISTING MAINTENANCE LOT

The master plan is recommending the sale of both the existing maintenance lot and the Cemetery Sexton's House. To sell the Sexton's House, the City would need further research to explore the options in more detail, including legal, historical, and title research. This process could take multiple years to accomplish.

There are no deed restrictions on selling the maintenance lot, but it's crucial to acknowledge that some utilities must be relocated before the lot's sale. Notably, a 10" public water main that runs across the lot from the northwest to southeast. Additionally, a traffic study was conducted in this area and recommended that the two access drives on to Sunset Avenue, from the lot, be removed and traffic be directed to the north on Sunset Lane.

Sunset Cemetery: Joint Maintenance Shop Layout Plan



CITY OF MANHATTAN CEMETERIES OPERATIONS AND POLICIES

BURIAL PLOT RECLAMATION POLICY

Currently, a reclamation policy for unused burial plots does not exist. The master plan recommends the establishment of such a policy. Industry standards vary, but burial plots that remain unused for 40 to 50 years tend to revert to the issuing entities. This proposed approach not only serves to enhance land management efficiency but also aligns with the evolving preferences and needs of the community.

NEW CEMETERY MANAGEMENT SOFTWARE

The master plan recommends upgrading the cemetery management software. Upgrading the software is a critical step due to the impending replacement of the existing AS400 program in the next few years. This upgrade is essential for improving efficiency, data accuracy, and accessibility in managing burial records and plot allocations. It will allow for the integration of modern features to streamline administrative processes and enhance public access to burial information.

OPERATIONS PLAN

Maintaining a comprehensive cemetery operations plan that incorporates perpetual care funds is important. These funds are a vital component of ensuring the long-term upkeep and preservation of cemetery grounds. A well-defined forecast for the perpetual care fund is essential to anticipate and secure the necessary resources for future maintenance and enhancements, safeguarding the cemetery's integrity and aesthetics.

Furthermore, the periodic review of current cemetery fees every 5 years is crucial to adapt to changing economic conditions and maintain a sustainable financial model. This regular assessment helps to ensure that fees align with the evolving costs of cemetery management, making certain that the community can continue to access high-quality cemetery services while guaranteeing the adequate funding of perpetual care for the generations to come. It is through this careful planning and financial diligence that the cemetery operations plan can meet its commitment to providing a tranquil, well-preserved, and accessible final resting place for the community.





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Chapter 5: Conclusion

In closing, the Sunrise and Sunset Cemeteries have been integral parts of the Manhattan, Kansas community for well over a century, with Sunrise Cemetery continuing to offer burial spaces for generations to come. This master plan represents a forward-looking investment in our cemeteries, designed to serve our community for the next several decades. The extensive public engagement and valuable input from stakeholders throughout this process underscore the

shared commitment to preserving the historical significance and natural beauty of these sacred grounds. With a focus on sustainability, accessibility, and honoring evolving preferences, this master plan stands as a testament to our dedication to maintaining these cherished spaces for years to come. We look forward to a future where both cemeteries continue to provide solace, remembrance, and a meaningful connection to our community's past and present.

IMPLEMENTATION AND BUDGET COSTS

The following information includes budget estimates for improvements shown on the final master plan concept. The cost for these improvements may vary depending on the size, quality, or complexity of the elements ultimately selected for each feature. The estimates were developed based on 2023 dollars and represent construction and design costs. A 20% contingency has been added to account for aspects of each project that are not known at this time. As projects are further developed and more refined budgets are prepared, consideration should be given to permitting fees, additional contingencies, and other costs necessary to complete each line item. Project budgets should also account for annual inflation and other market conditions based on the anticipated construction dates.

Sunrise Cemetery
Conceptual Master Plan Estimate
 1/2/2024



NO.	ITEM	Estimate
1	New Office (30'x40') at 2901 Stagg Hill Road; FFE; arch design; plus parking lot	\$ 700,000.00
2	Renovate Existing Shop; FFE; arch design; half of maintenance lot concrete and fence	\$ 400,000.00
3	New Shop (40'x80') at Sunrise Cemetery; FFE; arch design; half of maintenance lot concrete and fence	\$ 1,700,000.00
*There are seven road phases to expand the cemetery south. Those estimates have not been included at this time.		
Subtotal		\$ 2,800,000.00
Contingency (20%)		\$ 560,000.00
CONSTRUCTION COST		\$ 3,360,000.00

Sunset Cemetery
Conceptual Master Plan Estimate
 1/2/2024



NO.	ITEM	Estimate
1	Joint shop (30'x80') with Zoo; FFE; arch design fees; utilities; maintenance lot concrete; and fence/gates	\$ 1,300,000.00
2	Irrigation (irrigation mainline with frost free hydrants, no auto irrigation)	\$ 200,000.00
3	Columbarium Phase 1 (sixteen (16) 48-niche structures plus flatwork; first pod only)	\$ 360,000.00
4	Columbarium Phase 2 (sixteen (16) 48-niche structures plus flatwork; second pod only)	\$ 360,000.00
5	Columbarium Phase 3 (seven (7) 48-niche structures; one (1) 112-niche structure; plus flatwork)	\$ 250,000.00
6	Reconstruct Roads: Phase 1	\$ 570,000.00
7	Reconstruct Roads: Phase 2	\$ 510,000.00
8	Reconstruct Roads: Phase 3	\$ 510,000.00
9	Reconstruct Roads: Phase 4	\$ 380,000.00
10	Reconstruct Roads: Phase 5	\$ 510,000.00
11	ADA Sidewalk at Entry and Carriage House	\$ 60,000.00
12	Memorial Arch Settling	\$ 50,000.00
Subtotal		\$ 5,060,000.00
Contingency (20%)		\$ 1,012,000.00
CONSTRUCTION COST		\$ 6,072,000.00