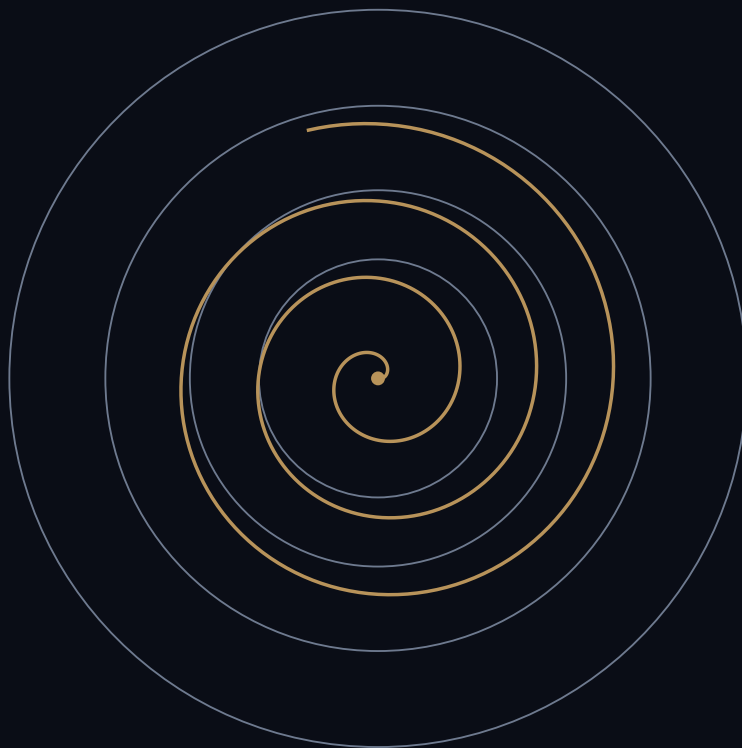




EPHEMERIS

EPHEMERIS MEMORIAL PARK

Every life, a fixed point in time.

INVESTOR WHITEPAPER · CONFIDENTIAL DRAFT

Prepared for prospective founding partners and investors

1 Executive Summary

A memorial park where a person's plot is not chosen — it is calculated. Ephemeris translates a date of death into a fixed, unrepeatable coordinate along a navigable scale-model of the sky, and builds a destination institution around that single mechanic.

Ephemeris is a proposed cemetery and memorial destination in which each interment's physical location is determined by a mathematical model rooted in astronomy: the position of the solar system at the moment of death. Visitors drive and walk through a scaled landscape of orbital rings and a compressed time-spiral, arriving at a specific, explainable coordinate — “she is here because this is where the sky was on July 2, 2026.” The grounds also house a museum for the interred, a Hall of Memories, a gift shop, and — in a later phase — a resort for visiting families.

The founder intends to be interred at Ephemeris. This is not a speculative real-estate venture designed for exit; it is a legacy institution, structured to be financially self-sustaining and legally durable well beyond its founder's lifetime.

Key facts

Item	Summary
Structure	Cemetery trust + hospitality LLC + retail/museum LLC under one holding company
Site status	Undetermined; Southern New Mexico and West Texas (Big Bend region) are lead candidates
Core IP	A validated “time-spiral” coordinate mapping (see Section 2) replacing literal orbital placement
Target buyer	Legacy-minded, moderately-to-highly affluent households; pre-need and at-need
Phase 1 ask	Land acquisition, entitlement, spiral construction, Hall of Memories, trust seed funding
Illustrative Phase 1 capex	\$9.5M – \$12M (directional; see Section 6)

2 The Concept

2.1 The insight

Traditional cemeteries organize the dead by rows, sections, and availability. That system was legible to the 19th century. It is not legible, or resonant, to a public that now carries a basic working knowledge of orbital mechanics, deep time, and scale. Ephemeris replaces an arbitrary plot number with a coordinate that means something: a specific, sourced, explainable position derived from the moment a life ended.

2.2 The mapping mechanic

An early version of this concept proposed placing each interment at a planet's literal orbital position on the date of death. That mechanic does not hold up mathematically at a buildable scale: a planet returns to nearly the same point in its orbit every year, so literal orbital placement collides within a few meters after only a handful of years of operation. The one quantity in the original pitch that never repeats is the solar system's own path through the galaxy — but at any driveable scale, a century of that motion spans continental distances, not park acreage.

Ephemeris resolves this with a **compressed time-spiral**: dates are encoded along an outward-winding spiral centered on a single sun-point, with spacing calibrated so that no two dates — across a multi-generational operating horizon — ever occupy the same location. Planetary rings remain in the landscape as literal, walkable waypoints and orientation markers (“you are passing Mars's ring”), giving visitors the orbital experience the concept promises, while the spiral — not the ring itself — performs the actual, collision-free date-to-location assignment. This is a deliberate design decision, validated in early technical review, and it is what makes the concept buildable at a defined, financeable footprint instead of an open-ended one.

2.3 The visitor experience

- **The Drive.** A road or path spirals outward from a central sun-plaza, passing waypoint rings for each planet, with interpretive markers on scale, distance, and the mathematics of the site.
- **The Hall of Memories.** A central building housing biographical exhibits for the interred — a living museum rather than a mausoleum.
- **The Museum.** Public-facing exhibits on astronomy, timekeeping, and the history of memorial practice, positioning Ephemeris as a cultural destination, not only a burial ground.
- **The Gift Shop.** Interpretive and memorial goods tied to the site's astronomical theme.
- **The Resort (Phase 2).** Lodging for visiting families, positioning multi-day visitation and repeat pilgrimage rather than a single transactional service.

3 Market & Customer

Ephemeris is not priced or positioned as a mass-market cemetery. The land-cost structure (Section 6) requires a destination-tier price point, which in turn defines the customer: affluent, deliberate households who already spend on legacy-oriented purchases — estate planning, philanthropic naming gifts, elaborate pre-need arrangements, art, and destination family gatherings. This is a smaller addressable market than the general death-care industry, and it is the correct one: Ephemeris competes with meaning-rich legacy purchases, not with the average municipal cemetery plot.

3.1 Demand signal

- The U.S. death-care industry exceeds \$20B annually; pre-need sales already represent a large and growing share of that volume, indicating buyers are comfortable planning and paying in advance for differentiated experiences.
- Destination and “green” or theme-oriented cemeteries (conservation burial grounds, memorial reefs, space-flown ash memorials) have demonstrated that a meaningfully differentiated framing supports premium pricing.
- Astro-tourism and dark-sky destination travel (national parks, observatories, eclipse tourism) is an active and growing travel category, suggesting a built-in visitor funnel independent of interment sales.

3.2 Revenue streams

Stream	Description	Phase
Plot sales (pre-need)	Advance sale of a future coordinate on the spiral	1
Plot sales (at-need)	Immediate placement at time of death	1
Perpetual care fee	Statutory + supplemental trust contribution per plot	1
Museum & Hall of Memories admission	General-public and family visitation	1
Retail	Gift shop, interpretive goods, memorial keepsakes	1
Lodging	Resort accommodation for visiting families and tourists	2
Licensing	Design/mapping-methodology licensing to sister sites	3

4 Site & Location Strategy

The mapping mechanic in Section 2 substantially reduces the land requirement first assumed for this concept. Early scoping (assuming literal orbital-scale placement) suggested a need for 20–700+ contiguous square miles. Under the time-spiral model, footprint becomes a design choice rather than an astronomical constraint: a spiral calibrated to a multi-generational operating horizon can be sited on a few contiguous square miles while preserving the full orbital-ring visitor experience. This reopens site options that a literal-scale model would have excluded.

4.1 Site requirements

- **Contiguous land**, single-title or a manageable 2–3 owner assembly — not a fragmented multi-owner parcel.
- **Water availability** sufficient for landscaping, a resort, and staff operations, with clean legal water rights (adjudicated basins carry real diligence risk, particularly in the arid Southwest).
- **Burial-depth feasibility** — acceptable water table depth and substrate; flood-plain and bedrock constraints must be screened county by county.
- **Airport proximity**, ideally under 90 minutes, to support fly-in visitation for a resort-anchored model.
- **Dark-sky quality**, both for thematic authenticity and because airport proximity and dark sky are in genuine tension — every candidate region trades one against the other to some degree.
- **Permissive cemetery and zoning law** for a mixed-use site (cemetery + hospitality + commercial retail on one contiguous property).

4.2 Candidate regions (preliminary)

Region	Land cost	Ownership reality	Water / burial	Airport	Dark sky
Southern New Mexico (Deming corridor)	\$300–\$1,000/ac	Private ranchland; single-title tracts feasible	Rio Grande / aquifer access; some caliche substrate	El Paso, ~60–90 min	Very good
West Texas (Marfa–Alpine–Van Horn)	\$250–\$800/ac	Large private ranches; assemblies common	Aquifer variable; workable	El Paso ~2.5h (exceeds target)	Excellent — protected dark-sky zone
Northern Arizona (I-40 corridor)	\$500–\$1,500/ac	Checkerboarded state trust / private — assembly risk	Limited; well-dependent	Flagstaff ~60–90 min	Very good
Central Oregon (high desert)	\$400–\$1,200/ac	Mixed private/BLM; assemblies possible	Decent groundwater; volcanic substrate patches	Bend ~90 min (regional only)	Excellent

Figures are directional, drawn from general market knowledge. Land pricing, water rights, and zoning require broker, hydrological, and legal verification before any acquisition commitment.

Recommendation: Southern New Mexico is the strongest all-around candidate — it is the only region on this list that clears both the airport and dark-sky thresholds simultaneously. West Texas carries a stronger existing cultural and tourism identity (the Marfa/Big Bend corridor already draws deliberate, affluent, fly-in visitors), which may outweigh its airport-distance gap if a charter airstrip is built into Phase 2 capex. A water-rights and basin-adjudication legal review is the single highest-priority diligence item before either region is committed to.

5 Legal & Regulatory Structure

5.1 Three-entity structure

Cemetery operation, hospitality, and retail are not typically licensable as a single entity, and — more importantly for the founder's intent — they should not share liability. Ephemeris is structured as three entities under one holding company:

- **Ephemeris Cemetery Trust** — holds the cemetery license, the perpetual-care trust, and all interment operations. Bankruptcy-remote from the other two entities.
- **Ephemeris Hospitality LLC** — owns and operates the resort/lodging business (Phase 2).
- **Ephemeris Museum & Retail LLC** — owns the Hall of Memories, museum, and gift shop operations.

This structure means a downturn or failure in the hospitality business can never reach the cemetery trust or the graves it maintains — the feature that lets the memorial function outlive the commercial venture around it.

5.2 Cemetery licensing

Both lead-candidate states (New Mexico, under the Cemetery Act, NMSA 58-17; Texas, under Health and Safety Code Chapter 712) require cemetery association registration and a funded perpetual-care trust prior to plot sales. Neither state caps cemetery acreage, and neither state's cemetery statute directly restricts the astronomical design of the grounds — the design is a landscape and zoning question, not a licensing one.

5.3 Zoning & entitlement

Mixed commercial use (resort, retail, museum) on cemetery-adjacent land requires separate zoning entitlement in most counties and is the harder approval relative to the cemetery license itself. Rural counties in the lead-candidate regions are generally permissive (many operate without formal countywide zoning), but this must be confirmed county-by-county before site selection is finalized.

5.4 Perpetual-care trust sizing

Statutory minimums for perpetual-care trust contributions (typically 10–15% of plot sale price) are calibrated for conventional, compact cemeteries — not for a site with a multi-square-mile footprint and correspondingly higher road, landscaping, and security maintenance liability. Ephemeris's financial model (Section 6) assumes a supplemental trust contribution well above the statutory floor, so that ongoing maintenance is funded by endowment income indefinitely, independent of future plot sales volume.

6 Business Model & Illustrative Unit Economics

All figures in this section are directional planning estimates only, built from general market assumptions rather than a completed appraisal, hydrological survey, or actuarial study. They are presented to establish the shape of the model, not to represent a committed budget.

6.1 The core ratio

Because most of a spiral-and-orbital-ring site is landscaped transit space rather than interment-bearing ground, the economics must be tracked as land-and-infrastructure cost **per sellable plot**, not per acre. A conventional cemetery can profitably price plots in the low thousands of dollars because its entire footprint is nearly all grave space. Ephemeric cannot: the ratio of “experience acreage” to “grave acreage” is inverted, which is precisely what justifies — and requires — a destination-tier price point.

6.2 Phase 1 illustrative assumptions

Assumption	Illustrative value
Phase 1 footprint	~2 contiguous sq. mi. (~1,280 acres)
Phase 1 interment capacity	5,000 plots
Land acquisition cost	~\$1.0M – \$1.6M
Entitlement & legal (three-entity setup, zoning, cemetery licensing)	~\$300K – \$500K
Spiral & grounds construction (grading, paths, plaza, landscaping)	~\$3.0M – \$4.0M
Hall of Memories / museum building	~\$3.5M – \$4.5M
Perpetual-care trust seed funding	~\$1.5M – \$2.0M
Illustrative Phase 1 total capex	\$9.5M – \$12.0M

6.3 Illustrative plot economics

Item	Illustrative value
Average plot price (destination tier)	\$12,000 – \$20,000
Statutory perpetual-care contribution (~15%)	\$1,800 – \$3,000 / plot
Supplemental trust contribution (target, above floor)	additional 15% / plot
Illustrative land+infrastructure cost per Phase 1 plot	$\$9.5\text{M} - \$12.0\text{M} \div 5,000 \approx$ \$1,900 – \$2,400

The gap between land-cost-per-plot (~\$2,000) and target sale price (\$12–\$20K) is intentional: it funds construction financing, the museum/hospitality build-out, marketing, and an above-floor perpetual-care endowment — not merely land.

6.4 Phase 2 (resort)

Phase 2 lodging capex is estimated separately at \$8M–\$15M depending on room count and service tier, funded from Phase 1 plot-sale proceeds and/or a dedicated hospitality raise once visitation demand is demonstrated. The hospitality LLC's financing is deliberately decoupled from the cemetery trust per the structure in Section 5.

7 Roadmap & Phasing

Phase	Milestones
0 — Foundation (0–9 mo)	Finalize time-spiral mapping methodology; site diligence (water rights, zoning, geotechnical) on lead candidates; three-entity legal formation; perpetual-care trust structure filed
1 — Ground & First Light (9–30 mo)	Land acquisition; entitlement; spiral and sun-plaza construction; Hall of Memories built; first plots sold (including founder's own); museum and gift shop open
2 — Destination (30–60 mo)	Resort/lodging built and opened; charter airstrip if West Texas is selected; marketing push to legacy-buyer demographic; visitation programming (astronomy events, dark-sky tourism partnerships)
3 — Expansion (60 mo+)	Additional spiral arms for capacity growth; evaluate licensing the mapping methodology to a second site in another region

8 Risks & Mitigations

Risk	Mitigation
Water rights unavailable or contested in chosen basin	Complete water-rights legal review before land is committed; treat as a go/no-go gate, not a post-purchase fix
Low plot density relative to land cost erodes margin	Price at destination tier; track land-cost-per-plot explicitly; do not benchmark against conventional cemetery pricing
Zoning/entitlement denial for mixed-use	Confirm county-level entitlement pathway pre-acquisition; favor counties with no or minimal formal zoning
Perpetual-care trust under-funded relative to footprint	Fund trust above statutory floor, sized to actual multi-square-mile maintenance liability, not the statutory percentage
Remote-site staffing for resort-quality hospitality	Budget for relocation/housing incentives; phase hospitality after cemetery/museum operations are stable
Demand risk — destination-tier buyer market is narrower than mass market	Validate with a soft-launch pre-need offering before Phase 2 capex is committed
Airport-distance vs. dark-sky tradeoff limits visitation	Select region deliberately (Section 4.2); consider a private charter airstrip as a Phase 2 line item

9 Founder's Note

“I am not building this to sell it. I intend to be interred here myself, and I want as many people as possible to choose to be interred alongside me — not out of obligation, but because the place itself gives their death a coordinate, a story, and a reason for their family to keep coming back. Every structural decision in this plan — the three-entity firewall, the above-floor trust, the phased build — exists to make sure this place outlasts me. That is the actual business model.”

This whitepaper is a planning document, prepared to structure diligence and investor conversation. Land, water, zoning, and construction figures require professional verification before any capital commitment is made.