



City of Grand Island

Tuesday, January 19, 2016

Study Session

Item -2

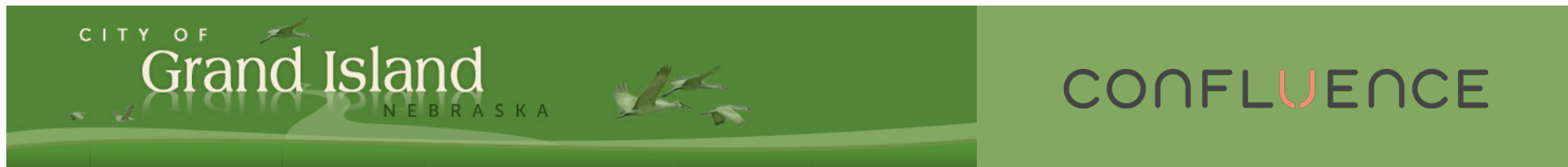
Discussion - Cemetery Expansion

Staff Contact: Todd McCoy, Parks & Recreation Director

Cemetery Site Selection and Analysis

City of Grand Island
Parks and Recreation Department

Summer 2015



Summary of Scope

- With Grand Island Cemetery nearing its capacity, a new cemetery location must be determined.
- Perform site inventory and cost analysis on several sites deemed appropriate for future cemetery expansion.
- Select a new cemetery site to focus design efforts on a master plan design that will strive to create the same pristine landscape character found at Grand Island Cemetery today.
- Produce a master plan that is intended to serve as a 50 year development guide to future expansion of the cemetery.

Through this site selection and analysis process, Confluence examined multiple sites as expansion possibilities for the Grand Island Cemetery. Examining a variety of different properties and locations, we have concluded that the four options included within would be suitable options for the cemetery's future needs. Each site has their benefits and challenges, all of which are explored in the following pages. Listed below are the sites chosen as potential expansion properties, in order from closest to the existing Grand Island Cemetery.

- ① Expansion site #1 - Webb Road Sport Fields
- ② Expansion site #2 - Westlawn Memorial Cemetery
- ③ Expansion site #3 - Undeveloped urban land
- ④ Expansion site #4 - Rural residential property
- ⑤ Expansion site #5 - Nebraska Veteran Memorial Cemetery site

Grand Island Cemetery

- 90 acres, centrally located
- Historic significance
- Mature Trees, lush lawns
- Established interior roads
- Well maintained headstones
- On-site maintenance facility
- Irrigation throughout
- Recreational walking opportunity
- 5-6 Years until zero vacancies
- Street presence along W. Stolley Park Road and S. Webb Road





Site Photos



Grand Island Cemetery - Aerial perspective from the south

Grand Island Cemetery - Site Photos

CITY OF
Grand Island
NEBRASKA



Well maintained plant beds along W. Stolley Park Road.



Canopy trees from the Cemetery create a tree-lined driving experience.



Mature trees define the cemetery boundary along S. Webb Rd.



Walkways and trails are used by residents for recreation.

Benefits

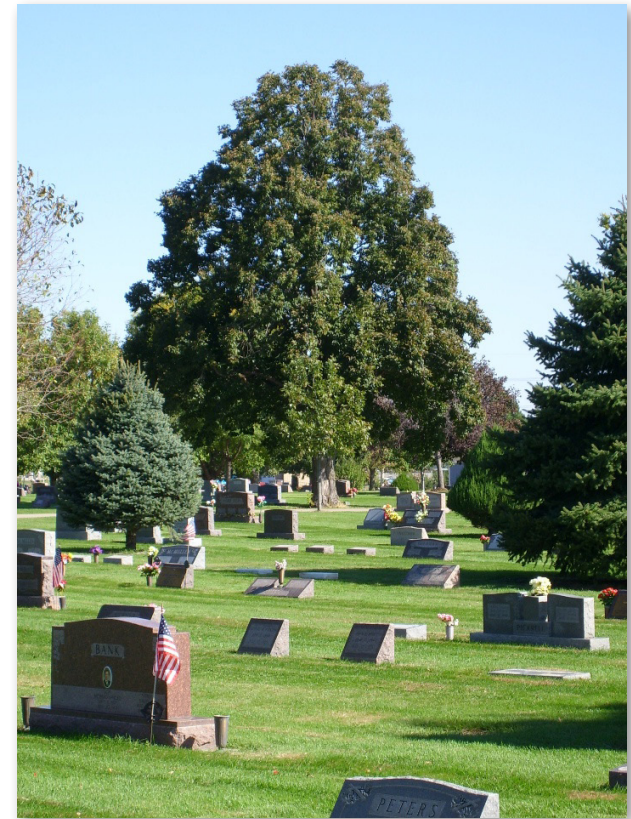
- 90 acres of lush lawn and mature trees provide a tranquil setting apart from the urban context.
- Size! Cemetery is nearly as big as Stolley Park, Ryder Park, and Pier Park combined!!
- Cemetery's vegetation and trees accent drive along W. Stolley Park Road and S. Webb Road.
- A variety of evergreen and deciduous trees cover the grounds
- Well maintained grounds and burial markers.
- On-site maintenance facilities and equipment.
- Historical presence in Grand Island
- Recreation opportunities
- Irrigation system throughout grounds

Challenges

- Intensive grounds and headstone maintenance
- Irrigation repairs
- Removal and replacement of aging trees
- Dust from adjacent concrete manufacturing plant.
- W. Stolley Park Road runs through the cemetery and may see an increase in traffic and development continues west.

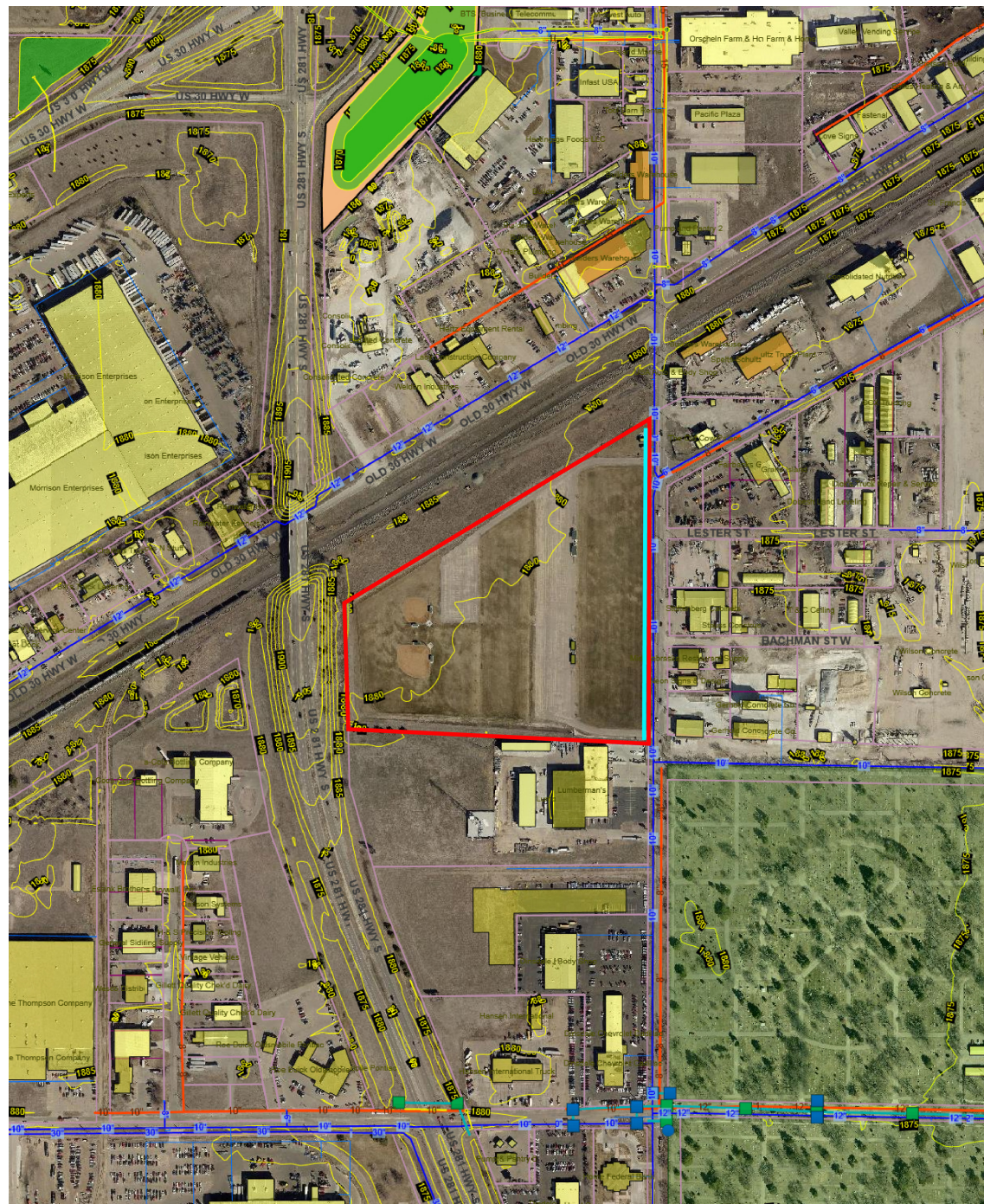
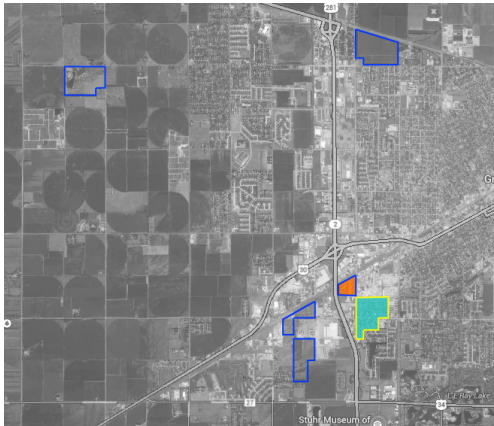
Constraints

- Limited capacity - averaging about 175 burials per year, the cemetery would have no vacancies in 5-7 years.
- Land-locked - With all the land around the historic cemetery now being developed, there is not room for the cemetery to expand and continue to be a contiguous destination.



Expansion Site #1

- 21.1 acres
- Closest site to existing cemetery
- Sports fields currently occupy site
- Grades appropriate for cemetery
- Limited expansion, land-locked
- Fields would need relocated
- No mature trees
- Field turf established
- Access limited to S. Webb Road
- Train tracks along northern edge
- US 281 R.O.W. to the west
- Industry on to the east and south
- Previously purchased for future cemetery
- Proposed decorative fence with 2 gates (cyan line)
- The perimeter of the site currently has chain-link fence.





Southern entrance to the Webb Road Fields.



Establish field turf throughout with very few trees.



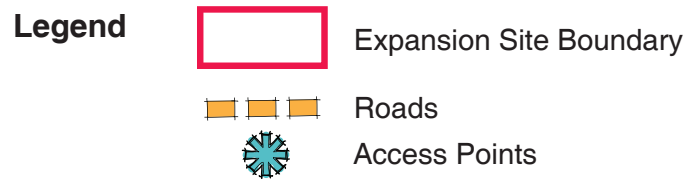
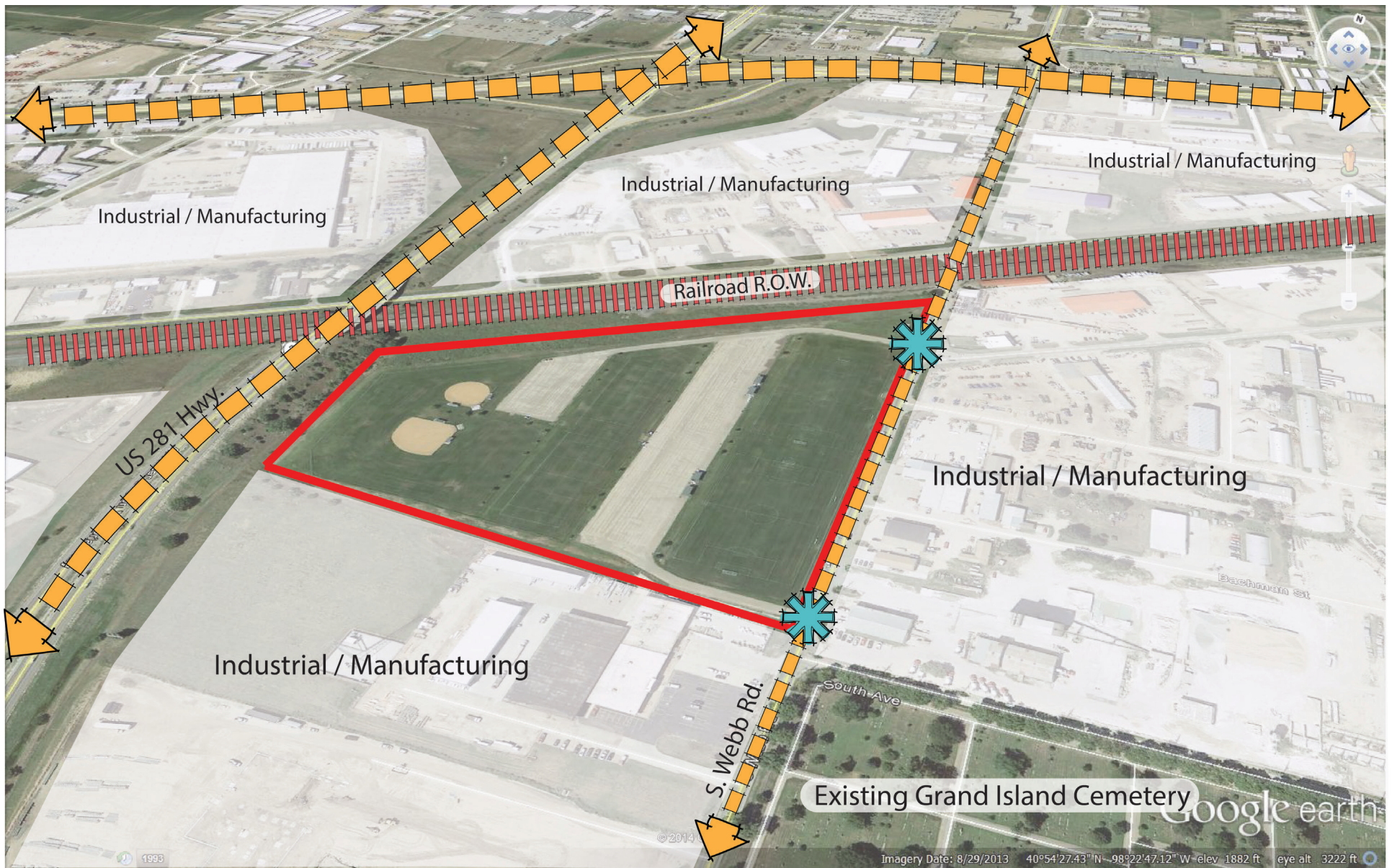
View of soccer fields from Webb Road.



Edge of a asphalt parking lot gives way to a drainage swale.

Site #1 - Site Photos

CITY OF
Grand Island
NEBRASKA



Benefits

- Location is closest to existing cemetery, may be able to continue using existing maintenance facilities.
- Land is relatively flat, meaning not a lot of earth work to create a cemetery.
- Ball fields move to Veterans Athletic Field Complex.
- This land was purchased with funds from the Cemetery Trust Fund for the future expansion and is land currently owned by the City of Grand Island.
- Irrigation system in place for sports fields, would be minimal cost to retrofit for cemetery.

Challenges

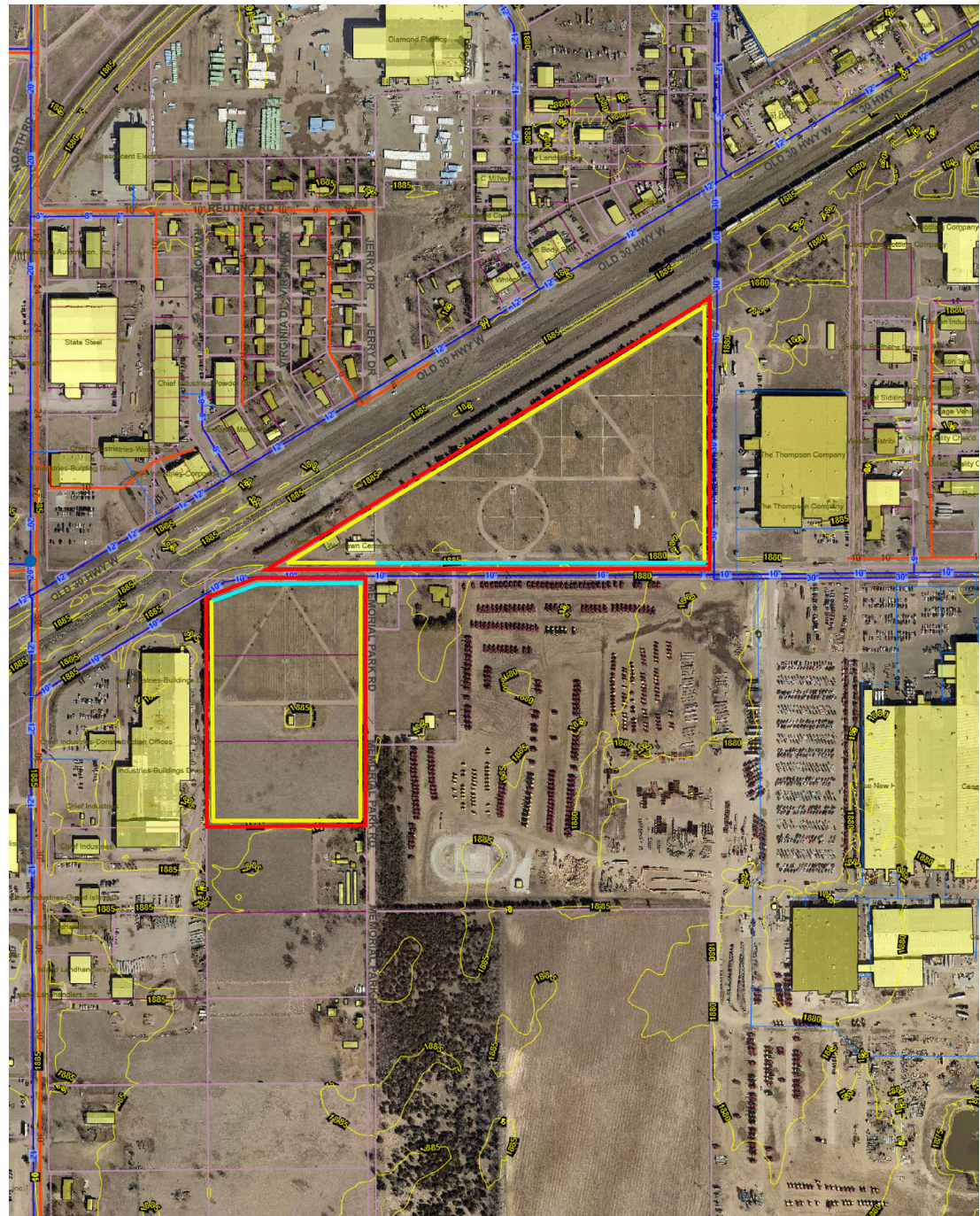
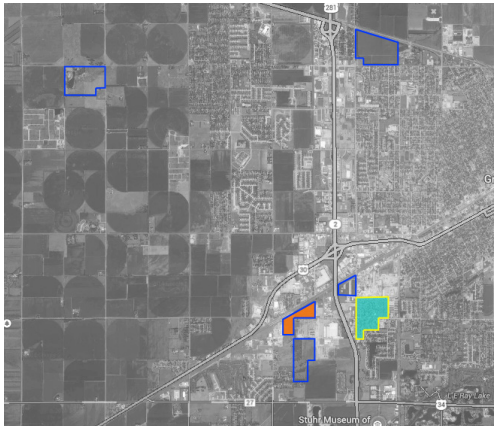
- Existing sports fields are heavily used and well maintained. Demolition and relocation will be required.
- With only 21 acres, our analysis shows this site's viable for approximately 41 years.
- Large portions have been developed into parking lots. The degree of compaction could impact future designs.
- Irrigation would need to be retrofitted to accommodate the cemetery's needs.
- Tree plantings must begin immediately to begin to build the desired cemetery character.
- Noise from adjacent highway and railroad tracks would need to be addressed to create a tranquil cemetery setting, buffers should be consideration in master planning.

Constraints

- Land-locked with US 281 Hwy embankment to West and RR ROW to the North, and varied industrial development on all other sides, future expansion for this site will be limited.
- Access points are only available off of S. Webb Road. Another access would be preferred if Webb Road would need to be closed for any reason.
- Ideally the fields would be relocated before demolition and construction of the cemetery would begin to limit backlash from the removal of popular sports facilities.

Expansion Site #2

- 33.5 acres, Existing Cemetery
- Less than 1 mile from GI Cemetery
- On-site maintenance facility
- Several monuments, sculptures, and burial markers
- Site is bisected by W. Stolley Park Rd
- Limited trees and landscaping
- Proposed decorative fence with 2 gates on north & 1 for south plots (cyan line)
- Proposed chain-link fence with 2 gates (yellow line)
- Existing capacity at 3,700 plots
- Expansion capacity on currently owned property figured at 6,500 plots.
- Future expansion possible by acquiring two residential lots to the south. (14.25 acres, indicated with dashed line)





First entrance from east along W. Stolley Park Road.



Interior path lined with flags for Memorial Day.



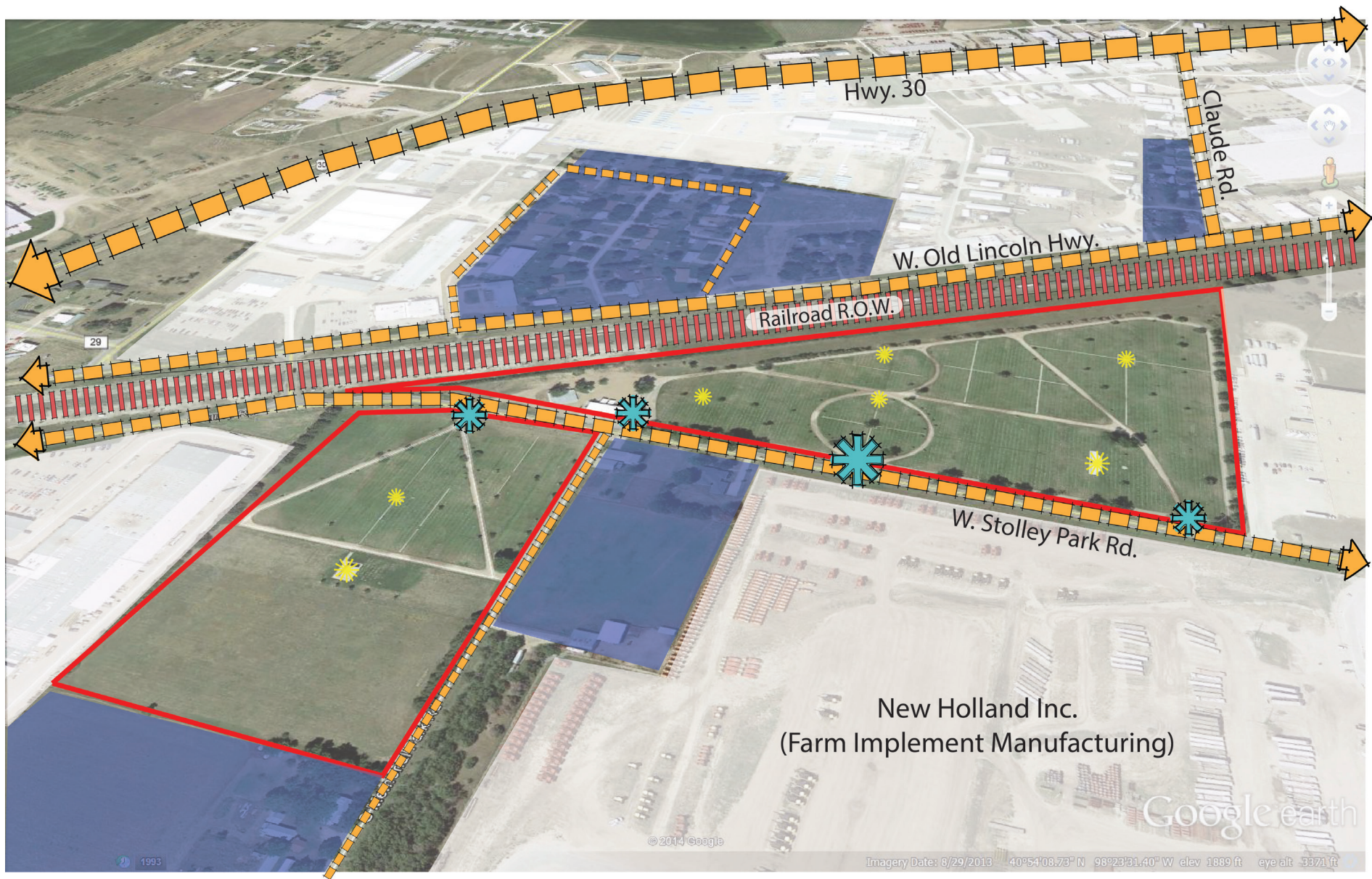
First view of cemetery from west along W. Stolley Park Road.



One type of burial marker in the area to the north of W. Stolley Park Road.

Site #2 - Analysis Map

CITY OF
Grand Island
NEBRASKA



Legend



Existing Site Boundary



Roads



Residential



Industrial / Manufacturing



Access Points



Monuments / Sculptures

Benefits

- This property is a functioning cemetery today, so combining the expansion efforts with this cemetery seems to make sense when considering operating and maintenance costs associated with a new development.
- Located close to the existing Grand Island Cemetery and along the same road, this may eliminate the need for an additional procession vehicle.
- Currently has approximately 10,000 plots available. At 200 burials per year plus the additional 175 averaged by the Grand Island Cemetery, the longevity would be limited to 25 years.
- Possible future expansion opportunity to the south. There are two large residential lots to the south, located along Memorial Park Road. These residential lots are located between two industrial sites. The land would need to be acquired, but would allow for further expansion.

Challenges

- Some trees and landscaping currently exist, but much would need to be done to bring it up to the character of the Grand Island Cemetery.
- The burial markers in the lot north of W. Stolley Park road are all flat. Some have settled and need to be reset.
- The site is bisected by W. Stolley Park Road which could see more traffic and development continues to occur to the west.
- Irrigation is on-site, but is limited to quick couplers and manual watering adjustment.
- Some interior roads have been paved, but the majority are asphalt or gravel paths.
- Lacks a sense of arrival. The main entrance is centrally located and does not serve as a good way-finding tool for visitors.
- Maintaining windbreak vegetation along the railroad tracks will need to be addressed.

Constraints

- The railroad R.O.W. limits future expansion to the north but several lots to the south could be acquired for development.
- A large manufacturing facility located to the SE creates some traffic and dust issues.
- The cemetery would need to be purchased and all agreements prior to acquisition would need to be carried forward.



Burial monument



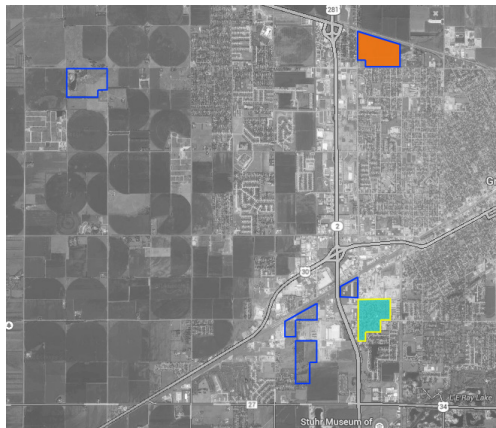
Celebration at the cemetery

Site #2 - Benefits & Challenges

CITY OF
Grand Island
NEBRASKA

Expansion Site #5

- 34 total acres
- Existing Nebraska Veterans Memorial Cemetery in SW corner
- Mature tree-line / wind break on West side of site
- Located on the northside of town
- 3.8 miles from GI Cemetery
- Two small sheds
- One existing shelter
- Grades appropriate for cemetery expansion
- Some perimeter fencing exists along the existing cemetery, but would upgrade for consistency
- Extents of proposed decorative fence with 1 gate (cyan line)





Aerial perspective from south along Capital Avenue.



Small shelter and flag pole.



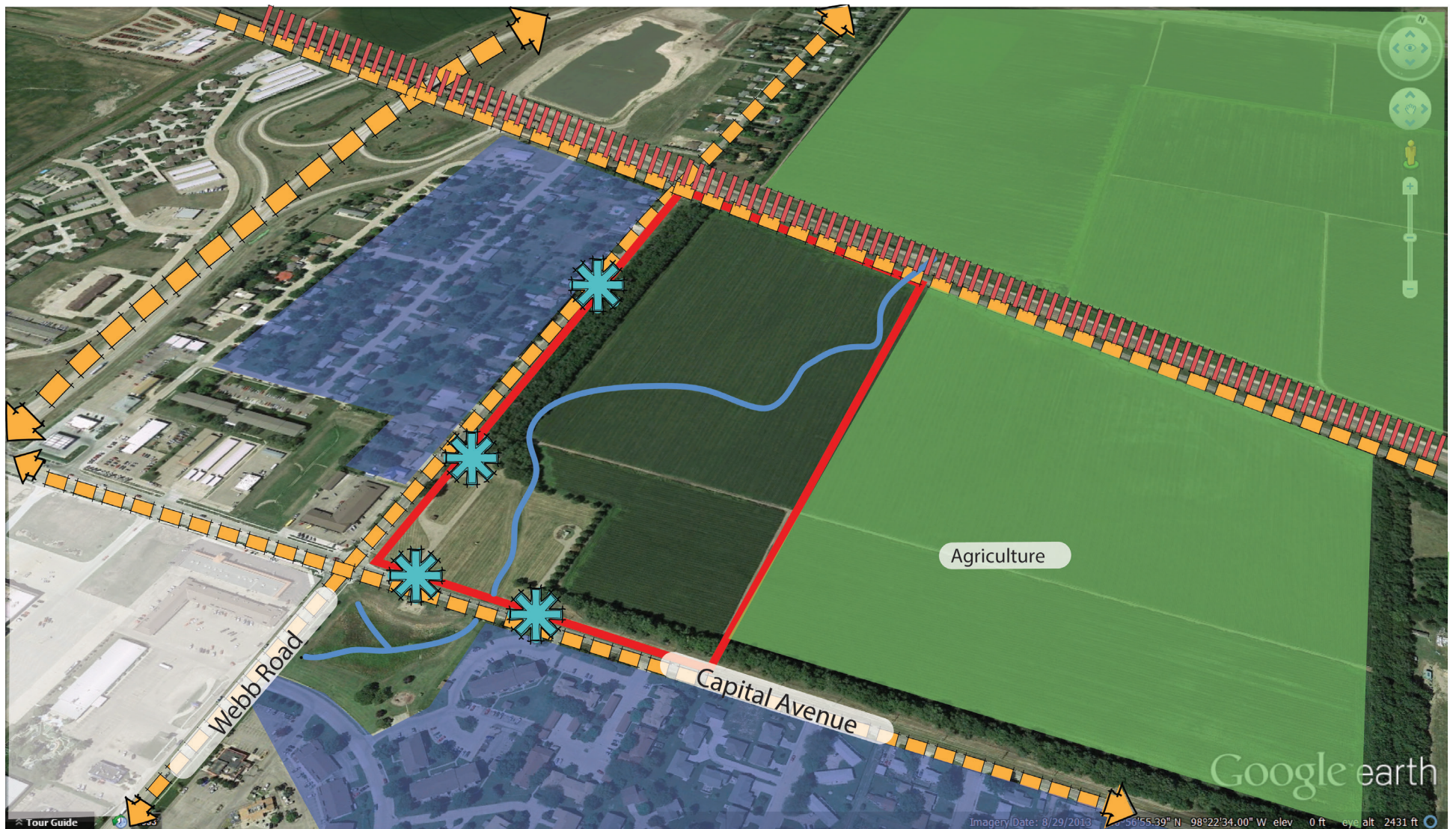
One of the existing gateways. Reuse gateways in future fence design.







Small shelter and trash can.

Site #5 - Site Photos

CITY OF
Grand Island
NEBRASKA



Legend

- | | | | |
|---|-------------------------|---|---------------|
|  | Expansion Site Boundary |  | Residential |
|  | Roads |  | Access Points |

Benefits

- If land would be donated by the State, so there are no acquisition costs.
- An existing cemetery is on-site, so shared maintenance facilities and equipment will be possible.
- Site has a good street presence and will provide good views.
- Multiple access points along both frontage roads, access through tree line could happen in the future.

Challenges

- Traffic along the roads could cause unwanted noise.
- Tree plantings must begin immediately to begin to build the desired cemetery character.
- Noise from adjacent highway and railroad tracks would need to be addressed to create a tranquil cemetery setting, buffers should be consideration in master planning.

Constraints

- The veterans cemetery must be incorporated into the future cemetery design.
- A drainage way existing through the site. Further study would be required to determine full impacts.

Grand Island Cemetery Expansion Study

Site Selection Matrix

	Site 1 - Webb Rd. Site (21 Acres)	Site 2 - Westlawn Site (33.5 Acres)	Site 3 - Undeveloped Urban	Site 4 - Rural Property	Site 5 - Veterans Cemetery Site
Land Acquisition	This land has been dedicated to the City of Grand Island for use of future cemetery expansion.	The Westlawn Memorial Cemetery owners have shown interest in selling the business to the city for it's expansion efforts, but there will be an acquisition cost.	This land is surrounded by Grand Island City limits. This land's proximity to the industrial development, may lend itself to higher land prices based on it's potential for future development.	Located just outside of town a couple of miles, this does not have a high potential for immediate development and may have lower land costs than Site 3.	Located on the north side of town at the intersection of Webb Road and Capital Ave. The land is currently owned by the State of Nebraska, who potentially could agree to provide the land to the City of Grand Island for no cost.
Site Improvements	The existing sports fields will need to be relocated and trees will need to be planted to help establish a character similar to the existing cemetery.	The current cemetery does not have the same character of the mature trees of the Grand Island Cemetery, but it does have a road layout and some landscaping in place.	Currently the land is occupied predominantly by cedar trees of varying size. Improvement would include selective removal of cedars and further planting the site to establish character and species diversity.	This rural site has many attributes that would make it comparable to the Grand Island Cemetery, including established windbreaks and mature trees.	Although this site has a small existing veterans cemetery, upgrades to the fence will likely be needed. The majority of the new site is currently in agricultural production, so establishing trees will be essential to matching the character of the Grand Island Cemetery.
Irrigation	The site has irrigation mains existing on site, but would need to be modified to accommodate the cemetery's needs.	A system of quick couplers exist but require constant adjustments. Investment in a permanent system is needed.	No irrigation exists on site. A new water service line may be required to handle the requirements of a cemetery.	A new water service line may be required to handle the requirements of a cemetery. However a small pond on site may be able to be used as a supplemental irrigation supply.	The existing cemetery has some irrigation in place, but expansion will be required. The new roadway project to the South includes all utilities so access to a larger water line is near by.
Maintenance Facility	This site is close enough to the existing Cemetery that new maintenance building is not required and equipment can be shared.	The Westlawn cemetery has maintenance buildings on site that could be utilized.	No structures exist on site and would need to be constructed.	Existing sheds and barns could be re-used for maintenance facilities. Some costs may be associated with retrofitting these existing structures.	As the cemetery develops there will be a need for additional sheds or maintenance areas. These costs could be budgeted in over time to minimize up front costs.
Maintenance Equipment	The equipment will be provided from the existing Grand Island Cemetery maintenance facility.	Maintenance equipment may be able to be shared with Grand Island Cemetery, or may be able to be purchased from the Westlawn Memorial Cemetery.	Maintenance equipment may be able to be shared with Grand Island Cemetery, but the distance between cemeteries may be a deterrent. In that case, new equipment would need to be purchased to be stored on site.	Cemetery equipment will need to be purchased as this property is too far from the existing cemetery.	Cemetery equipment will need to be purchased as this property is too far from the existing cemetery.
Additional Considerations	Land has been set aside for the relocation of the sports fields. The fields would likely need to be relocated prior to cemetery construction.	While there is some expansion space already associated with this land, the long-term potential may be limited without further land acquisition.	This site has plenty of room for expansion, but establishing a landscape character and on-site facilities will have associated costs.	This property will offer a pastoral setting to a future cemetery.	This property is well positioned in the North Central portion of the community and respectfully expanding the existing veterans' cemetery is a logical move.



Site Selection Matrix

Grand Island Cemetery Expansion Study

Expansion Development Cost Comparison

The amounts stated herein are our best estimate of probable construction costs based on current information. Because costs are influenced by market conditions, changes in project scope, and other factors beyond our control, we cannot ensure that actual construction costs will equal this cost opinion.

Cost Item / Action	Site 1 - Webb Rd. Site (21 Acres)	Site 2 - Westlawn Site (33.5 Acres)	Site 3 - Undeveloped Urban	Site 4 - Rural Property	Site 5 - Northern Site	Additional Notes
Land Acquisition	\$ -	\$ 968,000.00	\$ 351,250.00	\$ 520,000.00	\$ -	Site 3 - \$5,000/acre Site 4 - \$3,315/acre + Structures (\$200,000)
- Supplemental Costs	\$ 250,000.00	\$ 440,000.00	\$ 440,000.00	\$ 440,000.00	\$ 440,000.00	Cost to relocate sports fields / Reimbursement to Cemtery Trust
	\$ 250,000.00	\$ 1,408,000.00	\$ 791,250.00	\$ 960,000.00	\$ 440,000.00	
Site Improvements						
- Water Service / Irrigation	\$ 50,000.00	\$ 50,000.00	\$ 350,000.00	\$ 350,000.00	\$ 50,000.00	Based on availability of water source and existing infrastructure
- Electrical Service	\$ -	\$ -	\$ 10,000.00	\$ 8,000.00	\$ 8,000.00	Based on availability and existing infrastructure
- HMA Surfacing for Roads	\$ 180,000.00	\$ 329,700.00	\$ 375,000.00	\$ 428,500.00	\$ 180,000.00	3" HMA Lift on 6" base
- Compacted Aggregate Base	\$ 3,500.00	\$ -	\$ 37,500.00	\$ 42,850.00	\$ 18,000.00	3/4" minus compacted subbase - 6" depth
- Decorative Fencing	\$ 54,000.00	\$ 83,250.00	\$ 67,500.00	\$ 30,150.00	\$ 65,000.00	Includes gates (salvage gates from site #5)
- Standard Fencing	\$ -	\$ 118,000.00	\$ 73,000.00	\$ -	\$ -	6' tall vinyl coated chain-link fence
- Lighting	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	Allowance (safety lighting only)
- Tree Removal	\$ -	\$ -	\$ 15,000.00	\$ -	\$ -	
- Landscaping	\$ 75,000.00	\$ 40,000.00	\$ 40,000.00	\$ 25,000.00	\$ 50,000.00	
	\$ 392,500.00	\$ 650,950.00	\$ 998,000.00	\$ 914,500.00	\$ 401,000.00	
Maintenance Facility						
- 5,000 sf Pole-type building	\$ -	\$ -	\$ 150,000.00	\$ 100,000.00	\$ 100,000.00	Site 4 could utilize existing structures
- Plumbing	\$ -	\$ -	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	
- Electrical	\$ -	\$ -	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	
	\$ -	\$ -	\$ 200,000.00	\$ 150,000.00	\$ 150,000.00	
Maintenance Equipment						
- Backhoe Tractor	\$ -	\$ -	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	
- 2 Commercial Mowers	\$ -	\$ -	\$ 70,000.00	\$ 70,000.00	\$ 70,000.00	
- 2 Dump Trucks	\$ -	\$ -	\$ 120,000.00	\$ 120,000.00	\$ 120,000.00	
- Misc. Tools	\$ -	\$ -	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	
- 2 Grave warmers	\$ -	\$ -	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	
- 2 Propane Tanks	\$ -	\$ -	\$ 800.00	\$ 800.00	\$ 800.00	
- Fuel Tank	\$ -	\$ -	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	
- 2 Propane Tanks	\$ -	\$ -	\$ 800.00	\$ 800.00	\$ 800.00	
- Procession Vehicle	\$ -	\$ -	\$ 25,000.00	\$ 25,000.00	\$ 25,000.00	
- Office Equipment	\$ -	\$ -	\$ 8,000.00	\$ 8,000.00	\$ 8,000.00	
	\$ -	\$ -	\$ 325,600.00	\$ 325,600.00	\$ 325,600.00	
Total Cost of Expansion	\$ 642,500.00	\$ 2,058,950.00	\$ 2,314,850.00	\$ 2,350,100.00	\$ 1,316,600.00	

Site Selection - Cost Comparison

Site 1 - Webb Rd. Site	Year 1	Year 5	Year 10	Year 15	Notes
- Staffing Requirements	\$ -	\$ -	\$ -	\$ 65,000.00	No additional staff needed until full build-out
- Maintenance Costs	\$ 15,000.00	\$ 25,000.00	\$ 45,000.00	\$ 75,000.00	Minimal maintenance initially / costs increase as more site is developed
	\$ 15,000.00	\$ 25,000.00	\$ 45,000.00	\$ 140,000.00	

Site 2 - Westlawn Cemetery	Year 1	Year 5	Year 10	Year 15	Notes
- Staffing Requirements	\$ 130,000.00	\$ 130,000.00	\$ 195,000.00	\$ 195,000.00	2 additional staff will be required immediately to maintain existing cemetery
- Maintenance Costs	\$ 100,000.00	\$ 100,000.00	\$ 120,000.00	\$ 120,000.00	Additional maintenance funding required immediately to manage existing cemetery
	\$ 230,000.00	\$ 230,000.00	\$ 315,000.00	\$ 315,000.00	

Site 3 - Undeveloped Urban	Year 1	Year 5	Year 10	Year 15	Notes
- Staffing Requirements	\$ 65,000.00	\$ 130,000.00	\$ 130,000.00	\$ 130,000.00	1 additional staff need to manage site development, more as development expands
- Maintenance Costs	\$ 15,000.00	\$ 30,000.00	\$ 60,000.00	\$ 75,000.00	Maintenance costs minimal initially, but increase as development occurs
	\$ 80,000.00	\$ 160,000.00	\$ 190,000.00	\$ 205,000.00	

Site 4 - Rural Property	Year 1	Year 5	Year 10	Year 15	Notes
- Staffing Requirements	\$ 65,000.00	\$ 130,000.00	\$ 195,000.00	\$ 195,000.00	1 additional staff need to manage site development, more as development expands
- Maintenance Costs	\$ 15,000.00	\$ 30,000.00	\$ 60,000.00	\$ 75,000.00	Maintenance costs minimal initially, but increase as development occurs
	\$ 80,000.00	\$ 160,000.00	\$ 255,000.00	\$ 270,000.00	

Site 5 - Veterans Cemetery	Year 1	Year 5	Year 10	Year 15	Notes
- Staffing Requirements	\$ 65,000.00	\$ 130,000.00	\$ 195,000.00	\$ 195,000.00	1 additional staff need to manage site development, more as development expands
- Maintenance Costs	\$ 15,000.00	\$ 30,000.00	\$ 60,000.00	\$ 75,000.00	Maintenance costs minimal initially, but increase as development occurs
	\$ 80,000.00	\$ 160,000.00	\$ 255,000.00	\$ 270,000.00	

Notes:

1. Costs are represented in 5 year increments and each describes one year operational costs
2. Additional Staffing costs increase by \$65,000 per employee

Operational Cost Analysis

- Webb Rd. (Site 1) can be phased in over time while sharing the site with the existing sports fields. Sharing operational and maintenance costs would be beneficial for both parties.
- Westlawn Site will require at least 2 additional staff year one to maintain and manage the existing cemetery.
- Sites 3 & 4 would require 1 additional staff to maintain and develop the landscape characteristics that currently exist.
- In all cases, more maintenance staff would be required as development or expansion increases and those increases are represented in 5 year increments above.

SITE 1: WEBB ROAD SITE

Total acres: 919,116 sf (21.1 ac) see graphic below

20% of total acres for interior
road and parking development = 184,374 sf (4.2 ac)

$919,116 \text{ sf} - 184,374 \text{ sf} = 737,497 \text{ sf} (16.9 \text{ ac})$

20% of remaining acres for
landscape development = 147,499 sf (3.4 ac)

$737,497 \text{ sf} - 147,499 \text{ sf} = 589,998 \text{ sf} (13.5 \text{ ac})$

87,120 sf (2 ac) to be dedicated to
columbarium & other monument burial types

$589,998 - 87,120 \text{ sf} = 500,940 \text{ sf} (11.5 \text{ ac})$

Grand Island Cemetery averages 175 burials per year

Average burial plot size : 10' x 7' or 70 sf

Site dedicated to burial plots 500,940 sf (11.5 ac)

$500,940 \text{ sf} / 70 \text{ sf} = 7,156$ available burial plots

$7,156 / 175 \text{ per year} = 41$ years of traditional burial plots capacity at current rate*

* This assumes 2 additional acres will be dedicated to columbarium and other burial types.

The City of Grand Island purchased the Webb Road grounds 14 years ago with \$440,000 from the Cemetery Trust Funds. The agreement states that if the land is not used for the cemetery, the funds will have to be reimbursed plus interest.



SITE 2: WESTLAWN CEMETERY SITE

Total acres: 1,459,260 sf (33.5 ac)

Total acres available for future development: 443,874 sf (10.19 ac) see graphic below

20% of development land for interior
road and parking development = 52,699 sf (1.2 ac) **

**This number is figured on 20% of 263,495 sf, the southern portion of the
existing cemetery that does not have interior roads at this time.

$263,495 \text{ sf} - 52,699 \text{ sf} = 210,796 \text{ sf} (4.8 \text{ ac})$

$210,796 \text{ sf} + 180,379 \text{ sf}$ (Plots available, currently with interior roads)
 $= 391,175 \text{ sf} (9 \text{ ac})$ Remaining for development

10% of development land for
landscape development = 21,079 sf (0.48 ac)***

***This number is figured on 10% of 210,796 sf,
to match the existing vegetation cover at the cemetery.

$210,796 \text{ sf} - 21,079 \text{ sf} = 189,717 \text{ sf} (4.3 \text{ ac})$

$189,717 \text{ sf} + 180,379 \text{ sf}$ (plots available, currently landscaped)
 $= 370,096 \text{ sf} (8.5 \text{ ac})$ remaining after landscaping

This existing cemetery has columbarium & other monument burial types currently.
Additional land has not been set aside for these uses

Westlawn Cemetery averages 200 burials per year

$200 \text{ per year} + 175 \text{ per year}$ (Grand Island average burials per year) = 375 burials per year

Average burial plot size : 3.6' x 11' or 40.2 sf

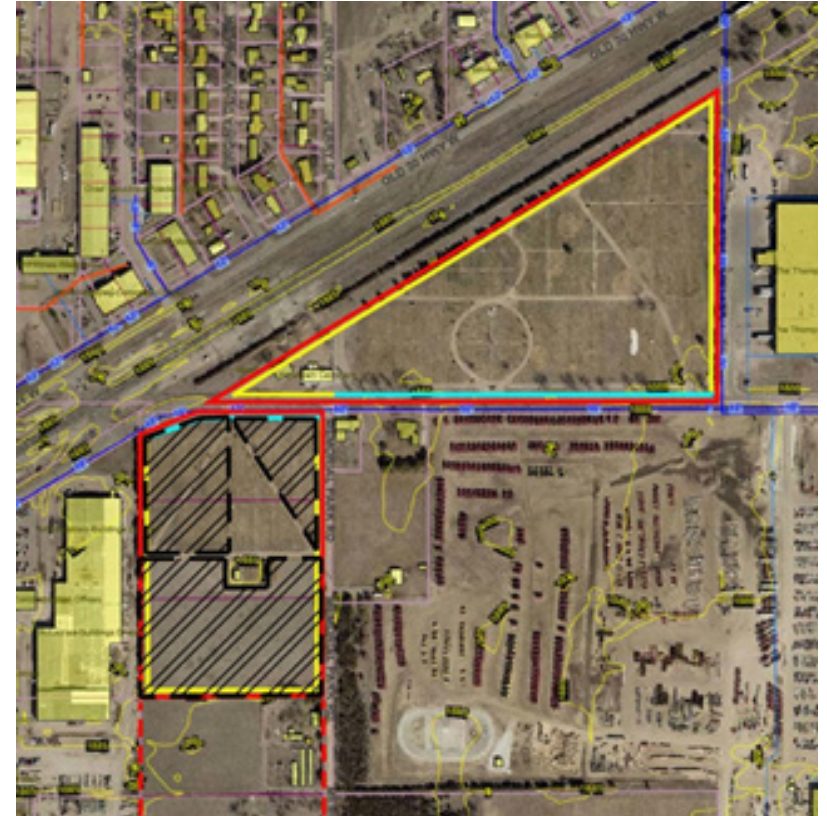
Site dedicated to burial plots 370,096 sf (8.5 ac)

$370,096 \text{ sf} / 40.2 \text{ sf} = 9,206$ available burial plots

$9,206 / 375 \text{ per year} = 24.5$ years of traditional burial plots capacity at current rate*

* This assumes 2 additional acres will be dedicated to columbarium and other burial types.

Westlawn Memorial Cemetery has stated that they have 3,700 available plots in the developed portions of the cemetery and additional 10,000 plots
in the 263,495 sf southern portion. Using 40.2 sf per plot, we determined the southern portion would allow approximately 6,555 plots.



Site 2 - Expansion Analysis

CITY OF
Grand Island
NEBRASKA

SITE 5: VETERANS CEMETERY SITE

Total acres: 1,484,525 sf (34 ac)

Total acres available for future development: 977,050 sf (22.43 ac) see graphic below

20% of phase 1 for interior
road and parking development = 195,410 sf (4.5 ac)

$977,050 \text{ sf} - 195,410 \text{ sf} = 781,640 \text{ sf} (17.9 \text{ ac})$

20% of remaining acres for
landscape development = 156,328 sf (3.6 ac)

$781,640 \text{ sf} - 156,328 \text{ sf} = 625,312 \text{ sf} (14.4 \text{ ac})$

87,120 sf (2 ac) to be dedicated to
columbarium & other monument burial types

$625,312 - 87,120 \text{ sf} = 538,192 \text{ sf} (12.4 \text{ ac})$

Grand Island Cemetery averages 175 burials per year

Average burial plot size : 10' x 7' or 70 sf

Site dedicated to burial plots 538,192 sf (12.4 ac)

$538,192 \text{ sf} / 70 \text{ sf} = 7,688 \text{ available burial plots}$

$7,688 / 175 \text{ per year} = 44 \text{ years of traditional burial plots capacity at current rate*}$

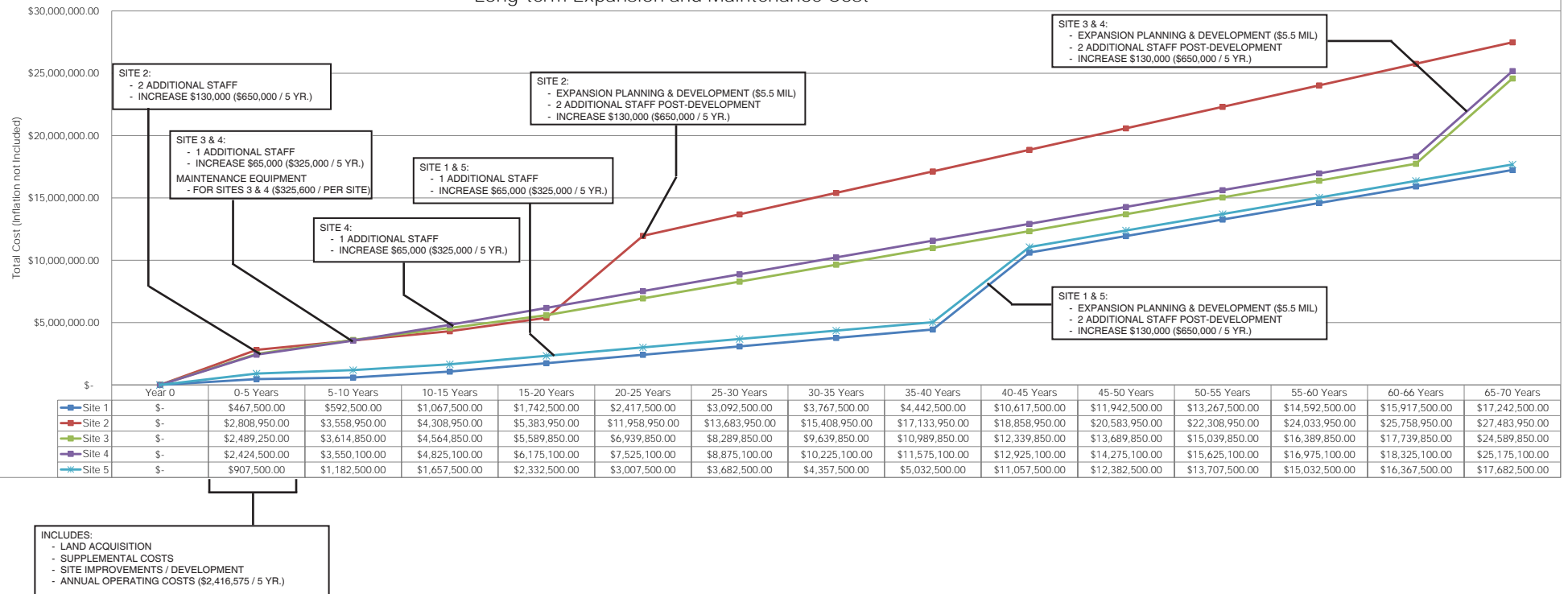
* This assumes 2 additional acres will be dedicated to columbarium and other burial types.



Site 5 - Expansion Analysis

CITY OF
Grand Island
NEBRASKA

Grand Island Cemetery Expansion: Long-term Expansion and Maintenance Cost



Cost Analysis

- Outlined above are increases in the operating or development budget based on cemetery capacities and required workforce.
- All other increases in cost are associated with regular annual operating costs, as provided.
- The 0-5 year period is assumed for land acquisition, supplemental costs, construction of maintenance facilities, if needed.
- The 5-10 year time-frame includes purchase of maintenance equipment for sites 3 & 4. Sites 1 & 2 utilize existing equipment.
- Site #2 has a capacity of approximately 25 years before further expansion development efforts are needed.
- Site #1 has a capacity of approximately 42 years before further expansion development efforts are needed.
- Sites #3 & 4 have similar capacities of approximately 73 years before further expansion development efforts are needed.
- Site #5 has a similar projection as Site #1, with the main difference being the additional cost of the cemetery trust reimbursement.

Long Term Projection Analysis

Site 1 Webb Road

- Proximity to the existing cemetery makes for an efficient expansion effort.
- This land has been dedicated to the cemetery for expansion purposes, so choosing a different site would result in \$350,000 plus interest to be reimbursed to the Cemetery Trust Fund.
- Lot size will limit the expansion opportunities.
- 42 years before future expansion needed.

Site 2 Westlawn Cemetery

- Since this is an active cemetery, it may seem appropriate to combine the maintenance and expansion efforts of both cemeteries.
- Acquiring land and business is more expensive than developing a new site.
- The capacity of this site is estimated around 25 years. This would require another expansion phase, but acquiring lots to the south for future expansion may be a more cost effective effort, but it does not make up for the initial cost to acquire this site.
- 25 years before future expansion needed.

Site 3 Undeveloped Urban Lot

- This property is located within the city boundary.
- Along with land acquisition, this site would need infrastructure and structures during initial development.
- This site has the possibility of utilizing the stand of cedar trees for the first phase of development, while landscaping improvements are made to the other portions of the site.
- While this site has more initial investment required, over time the amount of expansion opportunity will allow the cemetery to maintain a constant operating budget while sites 1 and 2 will require further planning efforts.
- 73 years before future expansion needed.

Site 4 Rural Property

- Outside of the city limits, this site would provide a tranquil setting for a lasting cemetery.
- Although some buildings on-site could be retrofitted for cemetery purposes, some infrastructure and road development would be required, along with the land acquisition.
- Similar to site 3, initial investment is required for this site, but the capacity points to this as a long-term expansion option.
- 73 years before future expansion needed.

Site 5 Veterans Cemetery Site

- Similar to Webb Road site's projections, without the field relocation costs.
- 44 years before future expansion needed.

Long-Term Projections - Site Comparison

CITY OF
Grand Island
NEBRASKA

Commissioned by
City of Grand Island - Parks and Recreation Department
Director: Todd McCoy

Produced by
CONFLUENCE
2015