



# Vistoso Trails Nature Preserve

Presentation to Town Council  
September 17, 2025

Kimley»»Horn

# Agenda

- Update on Progress
- Preliminary Costs
- Next Steps





# Update on Progress:

- Updated Concept of Pond Area
  - Includes memorial space with added features

## LEGEND

|          |                                                     |          |                               |          |                |          |                        |
|----------|-----------------------------------------------------|----------|-------------------------------|----------|----------------|----------|------------------------|
| <b>A</b> | Parking Lot with 27 Spaces Including 2 ADA Spaces   | <b>D</b> | Desert Landscape Planted Area | <b>G</b> | 16'x16' Ramada | <b>J</b> | Existing Concrete Path |
| <b>B</b> | Enhanced Landscape Entry Feature                    | <b>E</b> | Proposed Concrete Path        | <b>H</b> | 2.5 Acre Pond  | <b>K</b> | Memorial Space         |
| <b>C</b> | Proposed Stabilized Decomposed Granite Walking Path | <b>F</b> | 0.5 Acre Turf                 | <b>I</b> | Bench          |          |                        |





# Update on Progress:

- Updated Concept of Pond Area
- Restoration Focus
  - Driving range improvements
  - Cart path shoulder improvements





# Update on Progress:

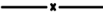
- Updated Concept of Pond Area
- Restoration Focus
- 90% Restoration Plans in Production (Preliminary Set Submitted for Town Review)
- 30% Pond Plans in Production (Preliminary Set Submitted for Town Review)





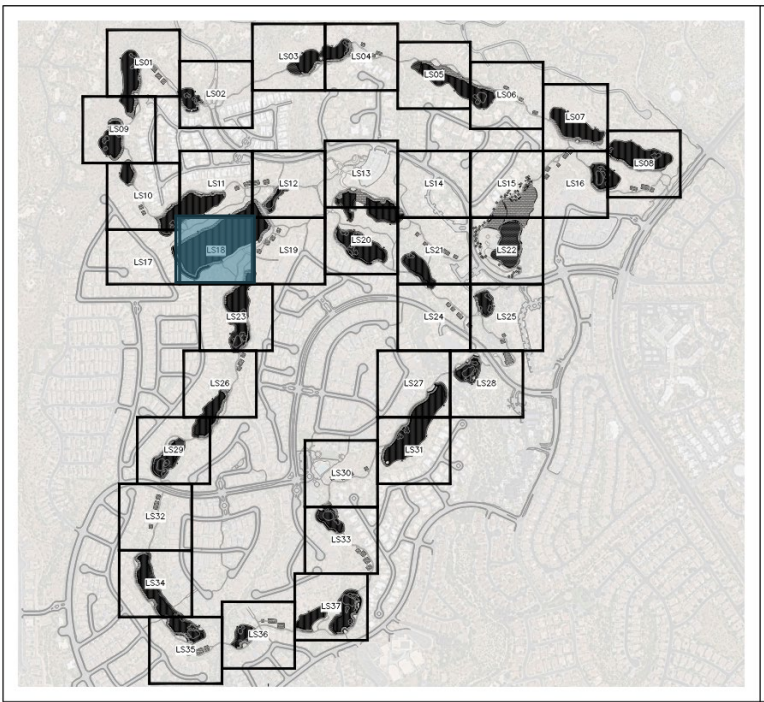
# Restoration Area

## SEEDING LEGEND

| SYMBOL                                                                            | SEED MIX                |
|-----------------------------------------------------------------------------------|-------------------------|
|  | SONORAN UPLAND SEED MIX |
|  | LOW-GROW SEED MIX       |
|  | FUTURE RESTORATION AREA |
|  | PROTECTION FENCING      |



Existing Condition



Proposed Slope Treatment



Slope Treatment  
to Include Desert  
Cobble, Seed &  
Accent Plantings

Protection  
Fencing to  
Limit  
Disturbance



# Seed Mix – Sonoran Upland

## TREES

*Prosopis velutina*, Velvet Mesquite\*

## SHRUBS

*Ambrosia deltoidea*, Triangle-leaf Bursage

*Atriplex canescens*, Salt Bush

*Calliandra eriophylla*, Fairy Duster

*Encelia farinosa*, Brittlebush

*Larrea tridentata*, Creosote

## SMALL PERENNIALS

*Baileya multiradiata*, Desert Marigold

*Cassia covesii*, Desert Senna

*Isocoma tenuisecta*, Burroweed

*Zinnia pumila*, Desert Zinnia

## PERENNIAL GRASSES

*Aristida purpurea*, Purple Three-Awn

*Bouteloua diversispicula*, Trailing Grama\*

*Distichlis spicata*, Desert Saltgrass\*

*Muhlenbergia porteri*, Bush Muhly

*Sporobolus cryptandrus*, Sand Dropseed

## ANNUAL HERBS AND GRASSES

*Bouteloua aristidoides*, Needle Grama

*Bouteloua barbata*, Six Weeks Grama

*Plantago insularis*, Indian Wheat

*Salvia columbariae*, Chia

*Sphaeralcea coulteri*, Globemallow



## SEEDING LEGEND

| SYMBOL | SEED MIX                |
|--------|-------------------------|
|        | SONORAN UPLAND SEED MIX |
|        | LOW-GROW SEED MIX       |
|        | FUTURE RESTORATION AREA |
|        | PROTECTION FENCING      |

\* Recommended, currently not on OV Approved Seed Mix



# Seed Mix – Low-Grow

## SHRUBS

Ambrosia deltoidea, Triangle-leaf Bursage  
 Calliandra eriophylla, Fairy Duster  
 Encelia farinosa, Brittlebush  
 Haplopappus laricifolius, Turpentine Bush

## SMALL PERENNIALS

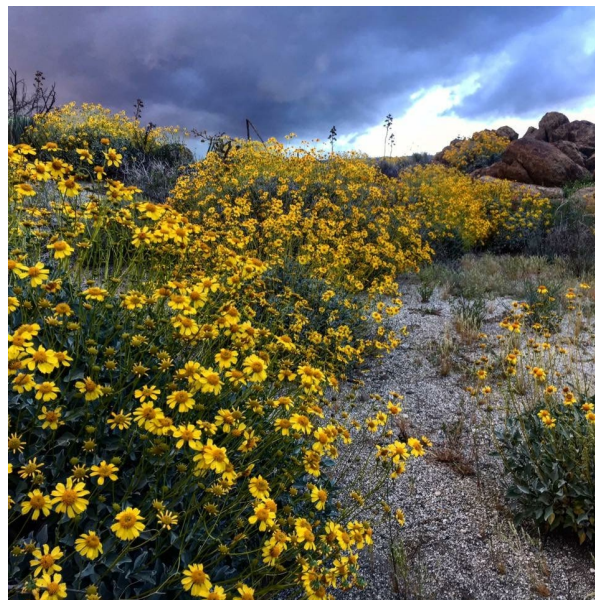
Baileya multiradiata, Desert Marigold  
 Psilostrophe cooperi, Paper Flower  
 Sphaeralcea ambigua, Desert Globemallow  
 Zinnia pumila, Desert Zinnia

## PERENNIAL GRASSES

Aristida purpurea, Purple Three-Awn  
 Bouteloua diversispicula, Trailing Grama\*  
 Digitaria californica, Arizona Cottontop  
 Distichlis spicata, Desert Saltgrass\*  
 Sporobolus cryptandrus, Sand Dropseed

## ANNUAL HERBS AND GRASSES

Bouteloua barbata, Six Weeks Grama  
 Datura discolor, Sacred Datura  
 Penstemon parryi, Parry's Penstemon  
 Plantago insularis, Indian Wheat  
 Tidestromia lanuginosa, Woolly Tidestromia



## SEEDING LEGEND

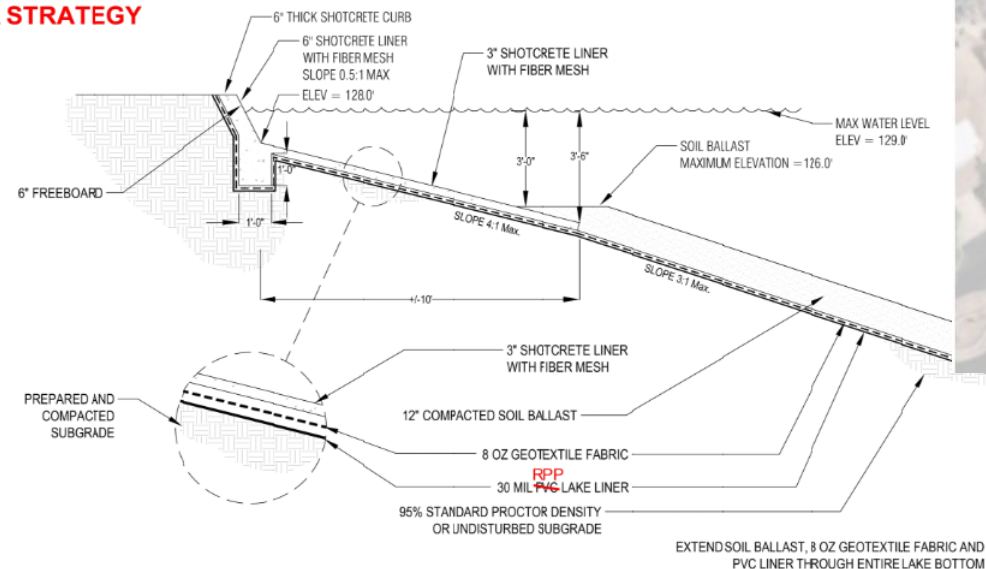
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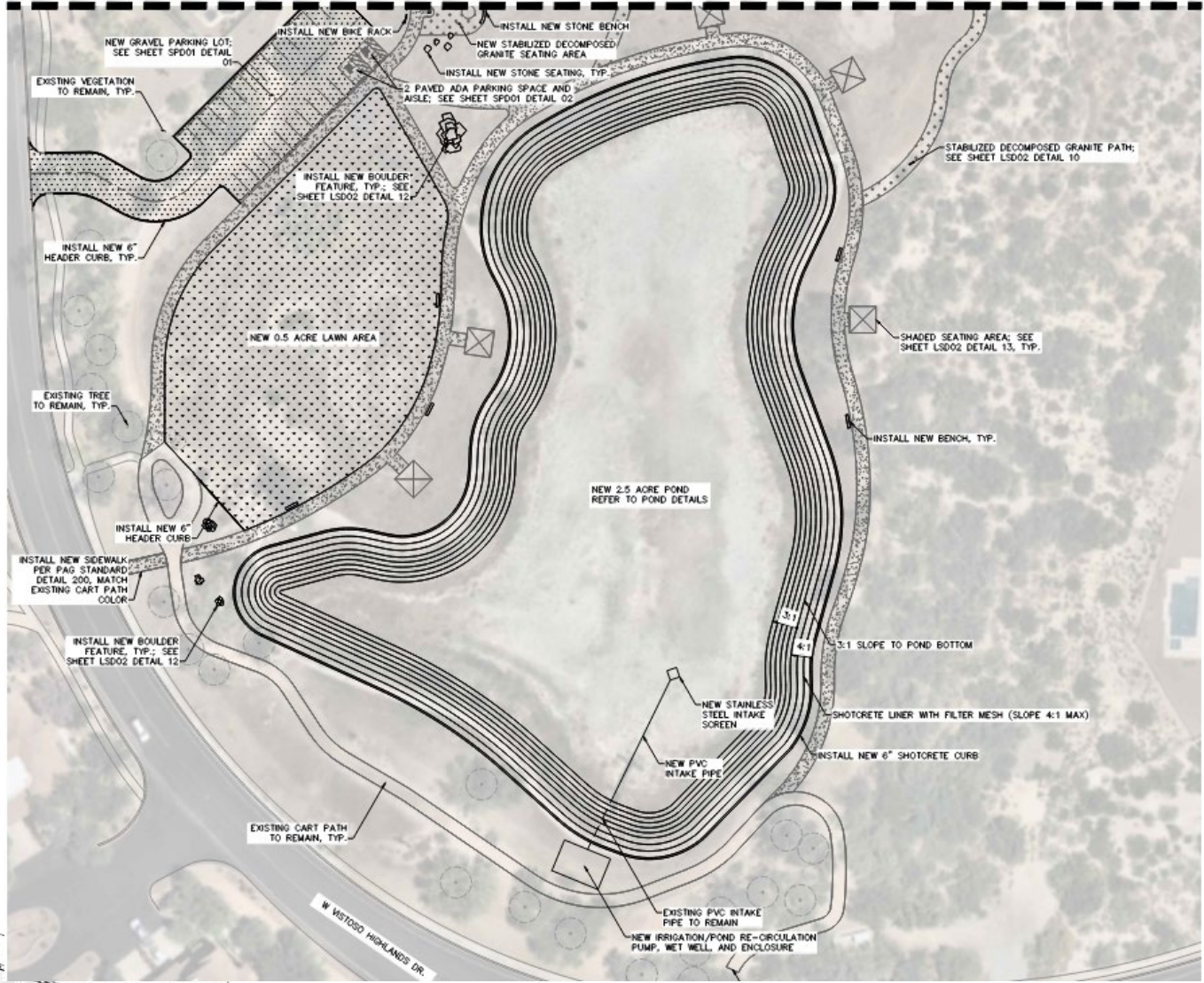
# Site/Pond Design

## SYNTHETIC LINER STRATEGY



NOTE:  
1. REMOVE ALL DEBRIS FROM LAKE BOTTOM PRIOR TO LINER INSTALLATION  
2. VERIFY THAT MAXIMUM SLOPES ARE NOT EXCEEDED AT ANY LOCATION WITHIN LAKE BOTTOM. REPORT ANY DISCREPANCIES TO OWNER REPRESENTATIVE PRIOR TO LAKE LINER INSTALLATION.

1 LAKE LINER CROSS SECTION DETAIL

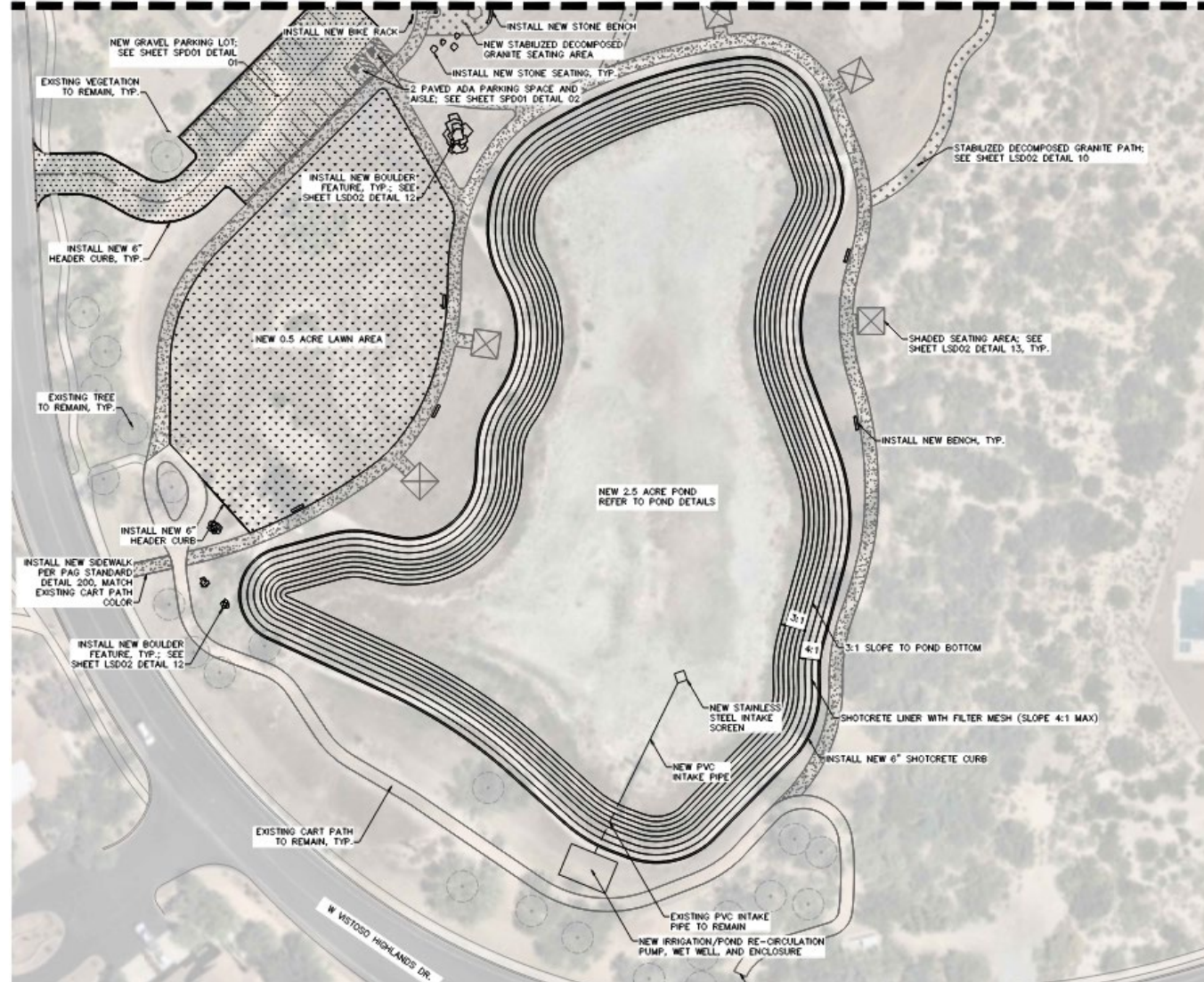




# Site/Pond Design



NOTES:  
1. REMOVE ALL DEBRIS FROM LAKE BOTTOM PRIOR TO LINER INSTALLATION.  
2. VERIFY THAT MAXIMUM SLOPES ARE NOT EXCEEDED AT ANY LOCATION WITHIN LAKE BOTTOM. REPORT ANY DISCREPANCIES TO OWNER REPRESENTATIVE PRIOR TO LAKE LINER INSTALLATION.





# Site/Pond Design



13 SHADED SEATING AREA

NTS



12 ROCK ENTRY FEATURE

NTS





# Planting Design - Trees



1. Whitethorn Acacia
2. Catclaw Acacia
3. Desert Ironwood
4. Blue Palo Verde
5. Velvet Mesquite



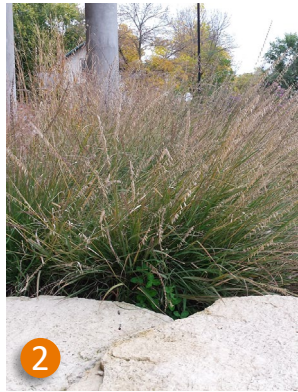
# Planting Design - Shrubs



- |                          |                       |
|--------------------------|-----------------------|
| 1. Wright's Bee Bush     | 8. Sacred Datura      |
| 2. Desert Milkweed       | 9. Turpentine Bush    |
| 3. Pineleaf Milkweed     | 10. Desert Marigold   |
| 4. Fourwing Saltbush     | 11. Creosote          |
| 5. Red Justicia          | 12. Jojoba            |
| 6. Woolly Butterfly Bush | 13. Gooding's Verbena |
| 7. Pink Fairy Duster     |                       |



# Planting Design - Accents



- |                          |                           |
|--------------------------|---------------------------|
| 1. Purple Three-Awn      | 6. Ocotillo               |
| 2. Side Oats Grama       | 7. Hedgehog Cactus        |
| 3. Saguaro               | 8. Fishhook Barrel Cactus |
| 4. Arizona Pencil Cholla | 9. Bear Grass             |
| 5. Arizona Cottontop     | 10. Soaptree Yucca        |



# Preliminary Costs: Golf Course Restoration

## Driving Range & Cart Path Shoulder Improvements

| Item                                   | Unit | Unit Price | Quantity | Amount    |
|----------------------------------------|------|------------|----------|-----------|
| Driving Range Restoration              | AC   | \$45,500   | 1.5      | \$68,250  |
| Erosion Control Measures               | AC   | \$2,000    | 1.5      | \$3,000   |
| Desert Cobble                          | SY   | \$10       | 7,260    | \$72,600  |
| DG Shoulder                            | SY   | \$10       | 13,440   | \$134,400 |
| Accent Plantings                       | LS   | \$20,000   | 1        | \$20,000  |
| Construction Subtotal                  |      |            |          | \$298,250 |
| Soft Costs – 25%<br>(Contingencies/CA) | LS   | \$74,565   | 1        | \$74,565  |
| Base Bid                               |      |            |          | \$372,815 |

### Notes:

- Driving range Restoration costs include noxious weed removal, landscape grading in sand trap areas, seeding application, tree protection, and 24 months establishment.





# Preliminary Cost Assessment: 2.5 Acre Pond

- Install: \$3,705,907
- Yearly O&M: \$45,000
- Yearly Water: \$90,000

Total Year 1: \$3,840,907

## Vistoso Preserve: 2.5 Acre Concept

Order of Magnitude O&M Costs

Revised: 4/9/2025

|                          |      | 2.5 Acre |          |           |
|--------------------------|------|----------|----------|-----------|
| Category                 | Unit | Qty      | O&M Unit | O&M       |
| POND MAINTENANCE         | AC   | 2.5      | \$6,000  | \$15,000  |
| TURF MAINTENANCE         | AC   | 0.5      | \$30,000 | \$15,000  |
| GENERAL PARK MAINTENANCE | AC   | 5.0      | \$3,000  | \$15,000  |
| YEARLY WATER             | LS   | 1.0      | \$90,000 | \$90,000  |
| GRAND TOTALS             |      |          |          | \$135,000 |
|                          |      | 2.5 Acre |          |           |

### Assumptions:

Pond maintenance includes chemicals, removing growth, pump repairs, etc. Turf maintenance includes staff for 15 hrs./week @ \$20 per hour (mowing, fertilizing, clean up, overseeding, irrigation adjustments, etc. General park maintenance includes tree trimming, fertilizer, seed, irrigation repairs, and weed abatement.

## Vistoso Preserve: 2.5 Acre Concept

Order of Magnitude Costs

|           | Category                                           | Unit | Unit Cost | Qty     | Sub Total   |
|-----------|----------------------------------------------------|------|-----------|---------|-------------|
|           | BBQ Grill                                          | EA   | \$675     | 5       | \$3,375     |
|           | Benches                                            | EA   | \$1,200   | 8       | \$9,600     |
|           | Bike Racks                                         | EA   | \$600     | 1       | \$600       |
|           | Drinking Fountain                                  | EA   | \$6,000   | 1       | \$6,000     |
|           | Irrigation (Landscape Drip)                        | AC   | \$20,000  | 3       | \$60,000    |
|           | Irrigation (Landscape Turf)                        | AC   | \$30,000  | 1       | \$21,000    |
|           | Picnic Tables                                      | EA   | \$2,000   | 10      | \$20,000    |
|           | Ramada (Small)                                     | EA   | \$35,000  | 5       | \$175,000   |
|           | Trail (Stabilized DG)                              | SF   | \$4       | 14,577  | \$58,308    |
|           | Trash (Receptacle)                                 | EA   | \$1,000   | 10      | \$10,000    |
|           | Park Amenity Totals                                |      |           |         | \$363,883   |
| Earthwork | Clearing & Grubbing                                | SF   | \$0.50    | 348,480 | \$174,240   |
|           | Rough Grading                                      | SF   | \$0.50    | 348,480 | \$174,240   |
|           | Construction Surveying & Materials Testing         | AC   | \$1,500   | 8       | \$12,000    |
|           | Earthwork Totals                                   |      |           |         | \$360,480   |
|           | Dust Control & SWPPP                               | AC   | \$1,500   | 8       | \$12,000    |
|           | General Landscape                                  | SF   | \$2       | 132,877 | \$265,754   |
|           | Turf (Sod)                                         | SF   | \$2       | 29,930  | \$59,860    |
|           | Parking Lot Improvements                           | SY   | \$65      | 1,080   | \$70,200    |
|           | Sidewalk Concrete (4-inch thick)                   | SF   | \$15      | 4,700   | \$70,500    |
|           | Lake Resurfacing/Liner/12-inch Cover Fill          | SF   | \$5       | 101,584 | \$507,920   |
|           | Lake Edge Treatment                                | LF   | \$300     | 1,425   | \$427,500   |
|           | Lake & Irrigation Mechanical Equipment & Enclosure | LS   | \$300,000 | 1       | \$300,000   |
|           | Infrastructure Totals                              |      |           |         | \$1,713,734 |
|           | Design/ Construction Documents                     | LS   | 10%       |         | \$243,810   |
|           | Construction Management with Internal Costs        | LS   | 10%       |         | \$243,810   |
|           | Mobilization/ Demobilization                       | LS   | 10%       |         | \$243,810   |
|           | Construction Overhead / Profit                     | LS   | 10%       |         | \$243,810   |
|           | Insurance                                          | LS   | 1%        |         | \$24,381    |
|           | Bond                                               | LS   | 1%        |         | \$24,381    |
|           | Construction Contingency                           | LS   | 10%       |         | \$243,810   |
|           | GRAND TOTAL                                        |      |           |         | \$3,705,907 |

### Assumptions:

This Order of Magnitude Cost Estimate cost has been derived from conceptual master plan graphics. Due to the preliminary nature of the design, assumptions on line items and unit quantities have been made. Additional line items and adjustments to the unit quantities are likely as the design progresses. Unit costs have been derived from projects of similar type and size. Those on the consultant team are not cost estimators and the unit costs are only impressions of the current market cost. This cost estimate does not account for potential impacts from tariffs or inflation. If a detailed cost estimate is needed, it is suggested that the Town hire an objective, third party professional cost estimator for exact current market conditions. Construction cost percentages are approximations based upon projects of similar size.





# Next Steps:

- 60% Pond Design/Final Restoration Design: December 2025
- 90% Pond Design: February 2026
- Final Pond Design: April 2026







# Vistoso Trails Nature Preserve

Kimley»»Horn