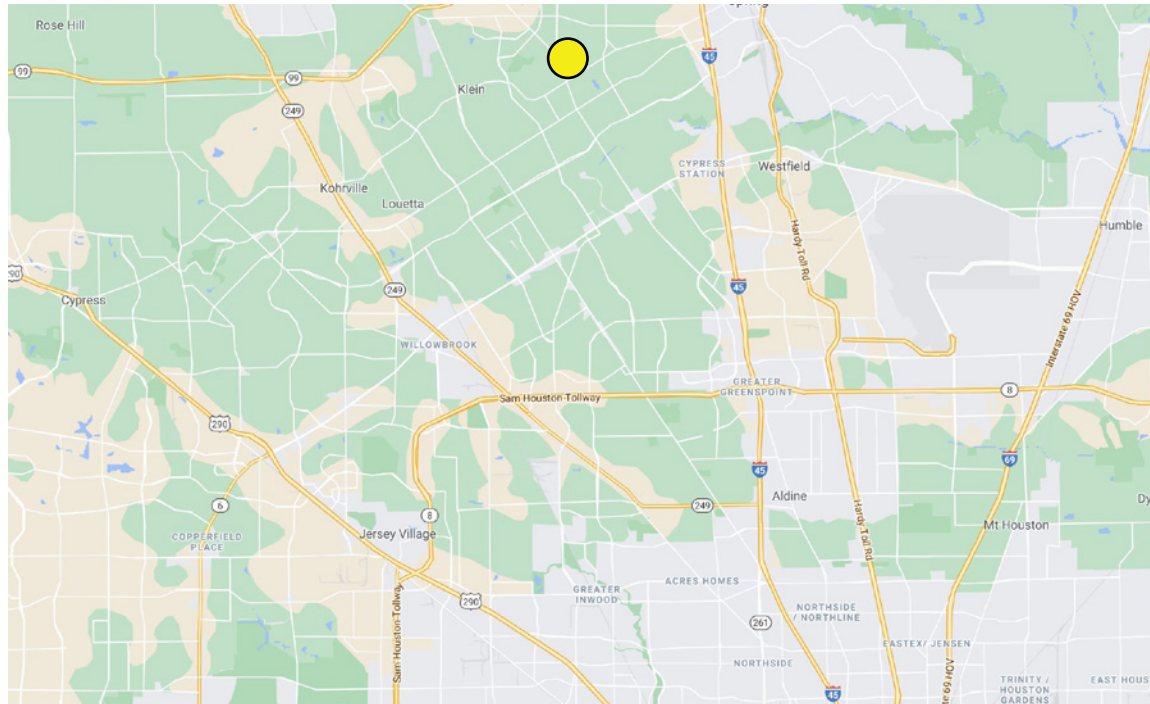


# CONCEPTUAL DESIGN PACKAGE FOR: BRIDGESTONE M.U.D. COMMUNITY PARK

## VICINITY MAP:



## PROJECT LOCATION MAP:



NOTE: ALL DRAWINGS WITHIN THIS PACKAGE ARE CONCEPTUAL AND SUBJECT TO CHANGE\*\*\*

## PREPARED BY:



ISSUE DATE:  
JUNE 25, 2021

# CONCEPTUAL DESIGN PACKAGE FOR BRIDGESTONE M.U.D.

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SITE AERIAL | NEARMAPS



SITE PHOTOS | BRIDGESTONE M.U.D. EDUCATION CENTER



SITE PHOTOS | PROPERTY BOUNDARY ALONG KUYKENDAHL RD.



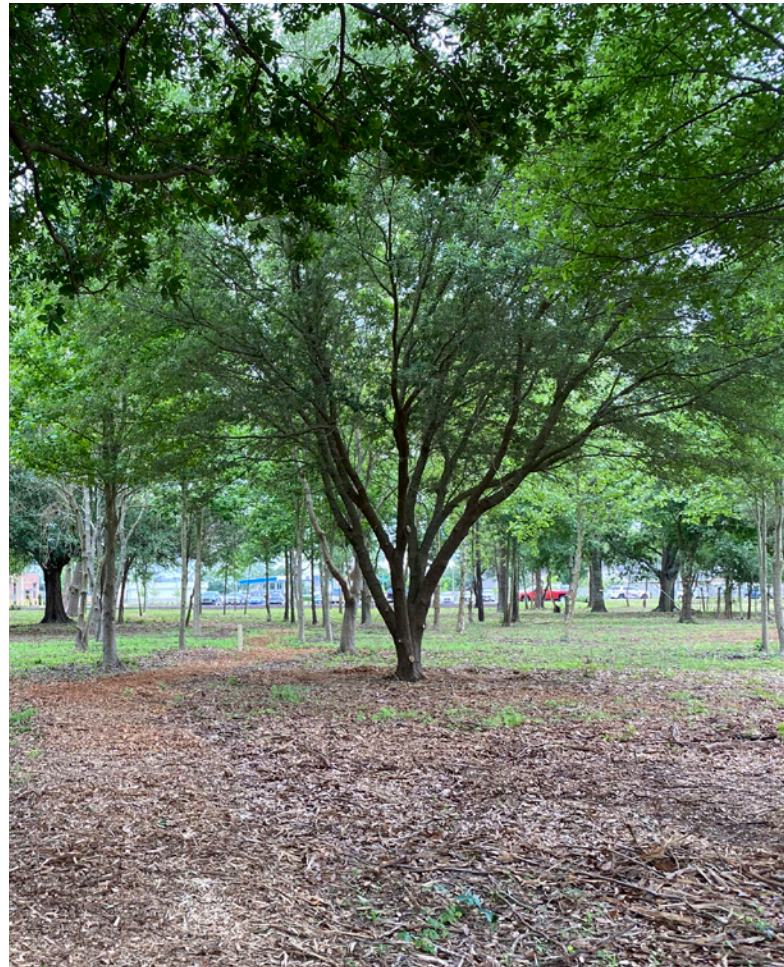
EXISTING DETENTION POND



SITE PHOTOS | EXISTING DETENTION BASIN

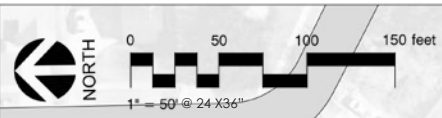


SITE PHOTOS | PROPERTY BOUNDARY ALONG DRAINAGE CHANNEL



SITE PHOTOS | EXISTING TREES





**LEGEND:**

(A) EXISTING PARKING LOT	(I) PLAYGROUND LAWN	(Q) EVENT LAWN
(B) EXISTING M.U.D. BUILDING	(J) WATER PLAY	(R) DOG PARK FOR SMALL DOGS
(C) PROPOSED PARKING LOT	(K) CLIMBING STRUCTURE	(S) DOG PARK FOR LARGE DOGS
(D) EXISTING DETENTION	(L) CUSTOM SWINGS	(T) WALKING TRAIL
(E) BOARDWALK	(M) HILL SLIDES	(U) PICNIC AREA
(F) PARK PAVILION & RESTROOMS	(N) CUSTOM PLAY STRUCTURE	(V) FOOD TRUCK PARKING
(G) AMENITY POND	(O) OUTDOOR GAMING	(W) FUTURE TRAIL CONNECTION
(H) CISTERN	(P) PUTTING GREEN	(X) STORAGE (SIZE TBD)

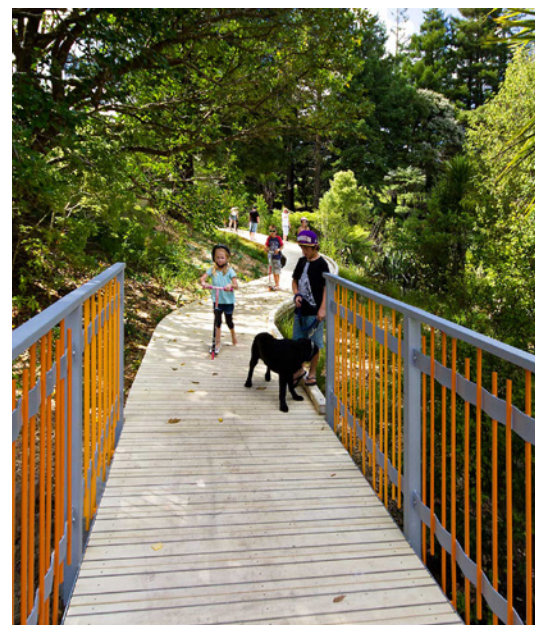
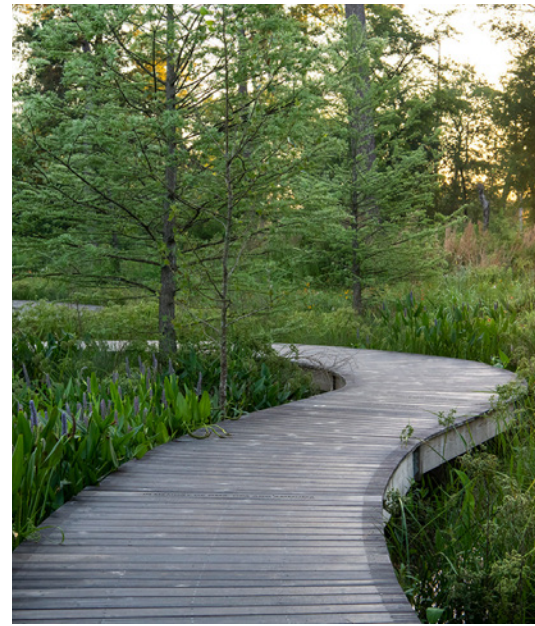
NOTE: THIS DRAWING IS CONCEPTUAL AND SUBJECT TO CHANGE\*

**CONCEPTUAL SITE PLAN**



NOTE: THIS DRAWING IS CONCEPTUAL AND SUBJECT TO CHANGE\*

## CONCEPT SKETCH



**CONSIDERATIONS FOR AMENITY PONDS:**

Amenity ponds are a great way to enhance an outdoor environment and provide unique recreational opportunities. There are several things to consider when designing a pond. Whether you choose to create a pond for passive or active use, there will always be long term maintenance to keep up with; however, ponds can provide great value to a park and its users.

**PASSIVE USES:**

- Provides detention
- Walking/ Jogging path around perimeter
- Aesthetic value--sometimes can include aesthetic features such as fountains, weir walls, boardwalks, and bridges.
- Consider creating habitat with planted edges (for fish, frogs, turtles, birds, insects)
- Consider reusing pond water for irrigation
- Consider providing educational opportunities for water reuse, plants and/or wildlife

**ACTIVE USES:**

- Consider Kayaking/ Canoeing (if pond is large enough)
- Fishing
- Swimming/wading

**ONGOING MAINTENANCE ITEMS:**

- Vegetated areas will have to be maintained to prevent overgrowth (both sod areas & planted)
- Nuisance species control of both vegetative and animal nuisances such as snakes and nutria
- Over-seeding for erosion control
- Periodic removal of debris and silt buildup to ensure proper drainage
- Clean out trash and debris left by users
- Active uses may require additional maintenance

AMENITY POND



**CONSIDERATIONS FOR CUSTOM PLAY STRUCTURES:**

Custom play structures are typically one of the most iconic features in premiere playgrounds. They can attract park users from surrounding communities and become very popular destinations for families. There are several manufacturers that can provide the type of structure and sometimes even architects can play a role in the design. If you choose to design a custom structure, there are many things to consider along the way.

- Metal vs. timber structures
- Colorful vs. natural tones
- Traditional vs. abstract structures
- Good visibility inside & outside the structure
- Offering a unique play experience that is unique to YOUR park
- Structures that are inclusive and provide play opportunities for children of all abilities
- How parents are able to move in & around the structure
- Ease of ongoing maintenance and part availability
- Warranty provided by vendor and/or installer
- Surfacing below

**ONGOING MAINTENANCE ITEMS:**

- All playground elements require maintenance- question the manufacturer for a complete guide to the recommended maintenance
- Surface replacement or replenishing of wood fiber mulch

NOTE: PRODUCTS SHOWN ARE FOR CONCEPTUAL PURPOSES ONLY - ACTUAL EQUIPMENT SELECTION SHALL BE DETERMINED IN DESIGN DEVELOPMENT PHASE WITH CLIENT PARTICIPATION\*\*\*



GROUP SWINGS



CALM SWAYING MOTION



SPINNING WITH BACK SUPPORT



GROUP SPINNING



SWINGS WITH EXTRA SUPPORT



MOTION & BALANCE



FRIENDSHIP SWING



COZY SPACES



NOTE: PRODUCTS SHOWN ARE FOR CONCEPTUAL PURPOSES ONLY - ACTUAL EQUIPMENT SELECTION SHALL BE DETERMINED IN DESIGN DEVELOPMENT PACKAGE \*\*\*

SWINGING & SWAYING

SPINNING



**WAYS TO MAKE SLIDES INCLUSIVE:**

- LANDINGS AT BOTTOM
- WIDER (FOR 2+ PEOPLE)
- ROLLER SLIDES VS PLASTIC (HELPS WITH STATIC FOR PEOPLE WITH HEARING IMPAIRMENTS)
- PROVIDE MULTIPLE LEVELS OF CHALLENGE
- PROVIDE ALTERNATIVE ROUTES TO REACH THE TOP



NOTE: PRODUCTS SHOWN ARE FOR CONCEPTUAL PURPOSES ONLY - ACTUAL EQUIPMENT SELECTION SHALL BE DETERMINED IN DESIGN DEVELOPMENT PHASE WITH CLIENT PARTICIPATION\*\*\*

## HILL SLIDES & ELEVATION CHANGE

## SENSORY PLAY



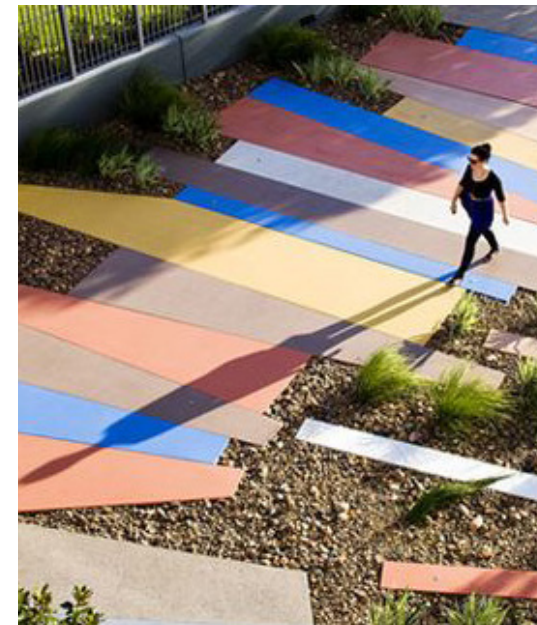
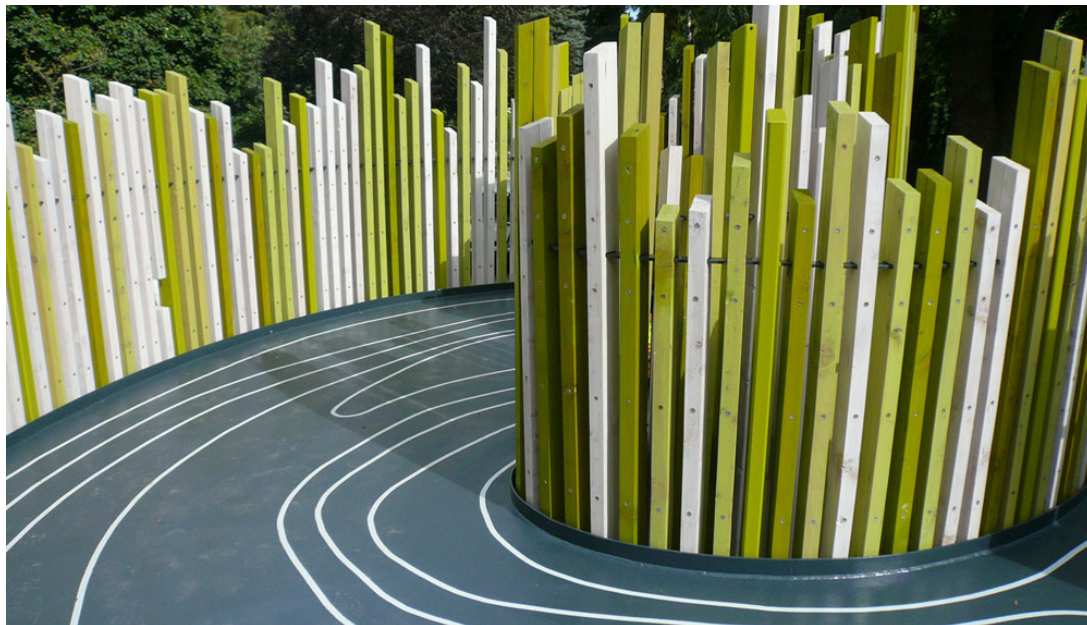
**CONSIDERATIONS FOR UNSTRUCTURED PLAY:**

Unstructured play is a form of play that involves imagination and creativity from the user. It is not your typical piece of play equipment and there is more than one way it can be used for play.

- Consider fixed vs. movable
- Consider items that can easily be repaired or replaced
- Sometimes creative elements or activities can get messy
- Consider whether the activity would require storage of items when park is closed or not in use

**ONGOING MAINTENANCE ITEMS:**

- All playground elements require maintenance
- Cleaning and replacement of parts may be necessary



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**UNSTRUCTURED PLAY**



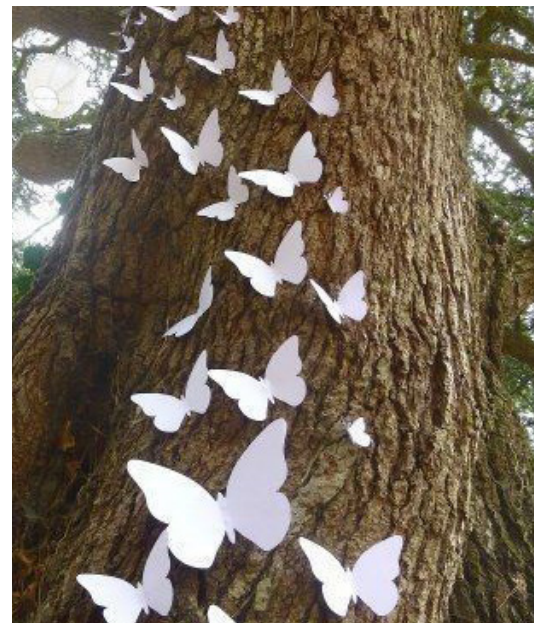
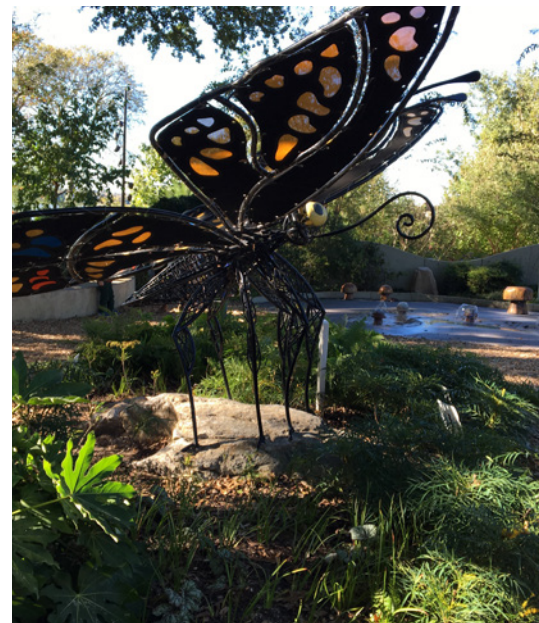
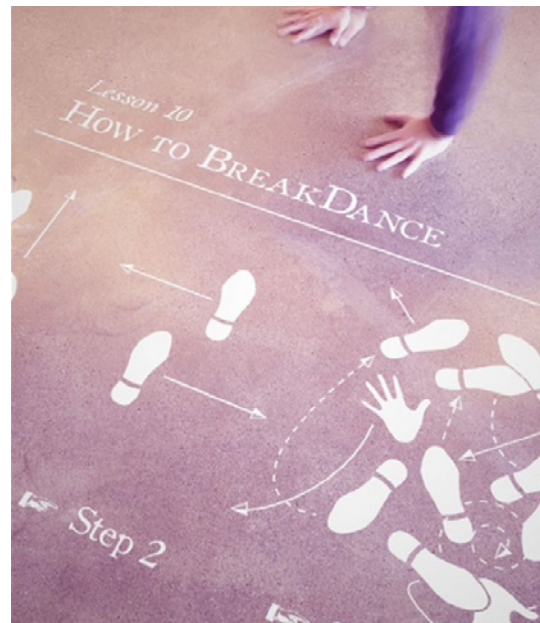
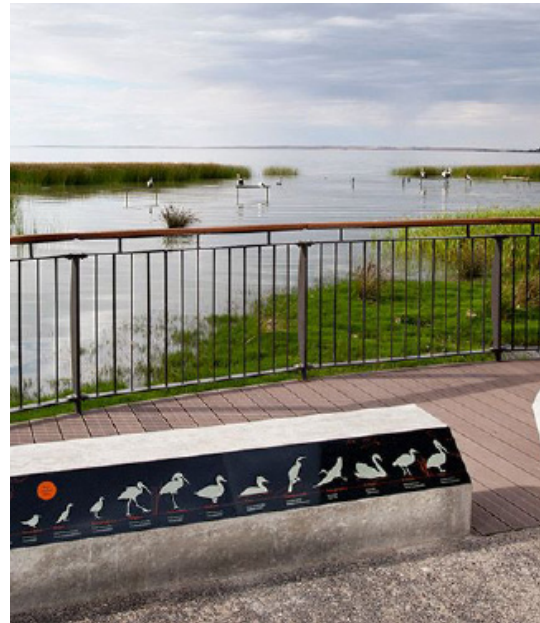
**CONSIDERATIONS FOR EDUCATIONAL PLAY:**

There are many ways to integrate educational components into the design of playgrounds and parks.

- Consider themes or learning objectives
- Consider different age groups
- Consider integrating elements such as lights, sound, and water using activation bollards, foot activators or motion detection. (There are many creative ways to make these elements interactive!)
- Consider careful selection of materials

**ONGOING MAINTENANCE ITEMS:**

- Cleaning may be required
- Vandalism is always a possibility and would need to be addressed as necessary (cleaning or replacement)



**EDUCATIONAL OPPORTUNITIES**





**CONSIDERATIONS FOR WATER PLAY:**

Water amenities such as splash pads are great amenities to provide in public parks. They help park users cool off during those hot summer months and are very popular among children--big & small! We always recommend using potable water for splash pads, however we like to propose systems where this potable water can be used for play, then collected, and re-purposed for irrigation in the park. If you really think about it, the plants have to be watered anyway, right?... So why not use that water for play before it hits the ground? This is a great sustainable practice and perfect for public parks.

- Re-purpose systems can be costly upfront
- Cistern tanks can be quite large and will require proper maintenance
- Consider above ground water sprays vs. in-ground (we almost always recommend in-ground fixtures)
- Surfacing needs to be slip resistant and easy to maintain

**ONGOING MAINTENANCE ITEMS:**

- All playground elements require maintenance
- Above ground sprays need wiping down regularly so not to water stain
- Cleaning and replacement of parts may be necessary
- Re-purpose system for gray water use will have a weekly filter to maintain and annual cistern clean out.
- If using a recirculated water system it is like having a pool and will require regular water testing and chemicals

**WATER PLAY**

# PUDDLE PARK

Puddle Park is a small pocket park centrally located in an established neighborhood within Clay Road Municipal Utility District. Before Puddle Park this area was vacant land, owned by the MUD, that presented a great opportunity to provide a recreation space for the residence. The site is about 1/2 acre and situated on the corner of Dayflower Drive and Cypress Royal Drive. Across the street there is another vacant MUD property that will become phase two of Puddle Park.

After much collaboration and consideration for what this park space could be, the community decided they wanted to build a splash pad to provide for the lack of public water amenities. One of the MUD board's main concerns was using a recirculation system, which would require additional maintenance personnel to test the reuse water and clean with chemicals which would never clean the water enough for kids to drink and ingest. Alternatively, the design team suggested that a more environmental and water conscious approach could be taken to conserve the used splash pad water in a storage tank for irrigation. The corrugated metal cistern sits on the adjacent MUD property, across the street from the splash pad. The cistern can hold up to 55,000 gallons of water at a time and was sized to maximize the amount of water stored to what the budget would allow. In the summer months when the kids are out of school the splash pad is most heavily used, likewise this is also when the irrigation system is at its most active as well. The goal is to irrigate when necessary and coordinate with the maintenance team to assure water is being pulled out of the cistern after a heavy weekend use of the splash pad. Controlling the timing of irrigation is important so that the grey water produced from children playing in the splash pad can be utilized to irrigate the park. It will assure that the plants will look their best and the turf will be healthy enough to withstand the heavy foot traffic from pickup soccer games and other recreational activities. Once the water has been drained from the cistern for irrigation, then this allows enough time for the cistern to refill prior to the next scheduled day of irrigation. Rain water is also collected in the drains year-round allowing the cistern to fill up during the months that the irrigation may be running minimally and the splash pad is turned off.

If you visit the park today, it is likely that you will find a group of the neighborhood children out with their families enjoying their new community space. This park has become an asset to the community and provides a gathering place for everyone to appreciate.



SUMMERTIME IRRIGATION

**CURRENT:**

Summertime Irrigation Stats:  
140 gpm/ Max 15min./3x's week  
**27,440 gallons per month**

**FUTURE PHASE 2:**

Summertime Irrigation Stats:  
13,552 gpm/ Max 15min./3x's week  
**2,439,360 gallons per month**



FALL/SPRING IRRIGATION

**CURRENT:**

Fall/Spring Irrigation Stats:  
140 gpm/ Max 15min./1 x week  
**9,144 gallons per month**

**FUTURE PHASE 2:**

Fall/Spring Irrigation Stats:  
13,552 gpm/ Max 15min./1 x week  
**203,280 gallons per month**



**December - February:**

**Splash Pad and irrigation is shut off, but still collecting rainwater.**



TODAY

TODAY, PUDDLE PARK USES AN ESTIMATED  
**109,752 GALLONS**  
OF WATER ANNUALLY FOR IRRIGATION



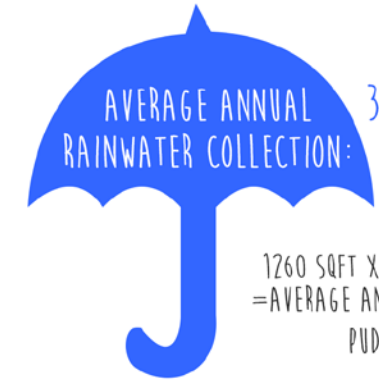
COLLECT

THE PUDDLE PARK SPLASH PAD USES APPROXIMATELY  
**1,596,000 GALLONS**  
OF WATER ANNUALLY OF POTABLE WATER AS CHILDREN PLAY



FUTURE

AFTER PHASE 2 IS COMPLETE, PUDDLE PARK WILL USE  
**2,642,640 GALLONS**  
OF WATER ANNUALLY FOR IRRIGATION



AVERAGE ANNUAL RAINWATER COLLECTION: **39,068 GALLONS PER YEAR**

1260 SQFT X 49.77" X .623  
=AVERAGE ANNUAL RAINFALL AT PUDDLE PARK

SPLASH PAD AREA = **1,260 SQFT.**

THE CISTERN AT PUDDLE PARK CAN HOLD  
**55,000 GALLONS**





### CONSIDERATIONS FOR ARCHITECTURAL STRUCTURES:

Open-air structures play an important role in outdoor environments. Choosing an architect is also another exciting element of the design process. These are some examples of structures & architectural styles; however, it is important to go through these discussions with an Architect that can help guide you through the specifics of park pavilions. Here are some things to start thinking about:

- Consider size or multiple structures
- Consider restrooms/ # of restrooms
- Consider max. occupancy of 15 sqft per person (ex: 100 people = 1,500 sqft structure)
- Consider family restrooms are roughly 110 sqft. per restroom
- Consider storage space (sqft can vary depending on use) Decide what you will be storing & if items will require air conditioning
- Consider providing electrical sockets, lighting, fans, water fountain, seating
- Consider movable furniture vs. stationary
- Consider roof type & angle
- Consider materials & finishes

### ONGOING MAINTENANCE ITEMS:

- Restrooms will require regular maintenance
- Vandalism is always a possibility and would need to be addressed as necessary (cleaning or replacement)
- Just like a home it will need regular cleaning and maintenance
- Consider day-to-day operations (ex. locking & unlocking restrooms)

## PAVILIONS & SHADE STRUCTURES



**CONSIDERATIONS FOR EVENT LAWNS:**  
 Event lawns can be great gathering spaces in communities. Often they are programmed to host family friendly events and activities. When not being used for events, lawns are great for unorganized play such as kicking a ball or flying a kite. There are several things to plan for when creating a space to host large crowds.

- Consider size
- Consider parking for food trucks (also providing electrical & water-for clean up)
- Consider programming- what events will you host & who will be planning these events?



- ONGOING MAINTENANCE ITEMS:**
- Plan for extra trash clean-up for events/ provide temporary trash bins
  - Management company to oversee reservations and plan events at the park
  - Reservation software to allow for online bookings
  - Overseeding, fertilizing, and aerating the lawn space after events



EVENT LAWN



**CONSIDERATIONS FOR DOG PARKS:**

Our furry friends love a place to run and socialize too! Dog parks are very popular amenities in communities and require specific design elements to help keep everyone safe. If you choose to incorporate a dog off leash area, there are many things to consider.

- Providing separate areas for large & small dogs
- Fence type & height
- Shade (structures vs tree canopy)
- Providing wash stations
- Careful placement of drinking fountains, dog waste stations, benches, and trash receptacles
- Drainage
- Playful elements for dogs
- Water play for dogs
- Specific rules relating to the Dog Park

**ONGOING MAINTENANCE ITEMS:**

- Continuous dog waste and trash pick up
- Mowing and underbrush clearing
- Replenishment of potential surface materials



**DOG PARK**



### CONSIDERATIONS FOR OUTDOOR GAMES:

Outdoor games can make for a great amenity to those that aren't into playgrounds or sports fields. Games can provide an amenity to Seniors and Teens to help bridge the gaps between the ages. Community members can provide their own paddles, pieces, or balls similar to going to a basketball court or tennis facility or the park can host a stash of equipment as well for borrowing.

- Consider adding a variety of games
- Consider materials of game boards for ease of maintenance

### ONGOING MAINTENANCE ITEMS:

- May need replacement of parts if damaged or stolen
- Regular wipe downs to make sure that amenities are clean



## OUTDOOR GAMING



FITNESS POD/ GROUP EXERCISE

**CONSIDERATIONS FOR FITNESS AREAS:**

Fitness stations are often placed along trails or in designated areas of parks. They can promote a healthy lifestyle and are great for ages 16+. There are a variety of opportunities depending upon ages and difficulty of activity.

- Consider placement of equipment
- Consider equipment with movable parts vs. stationary pieces
- Consider equipment that isn't too strenuous to help prevent injury

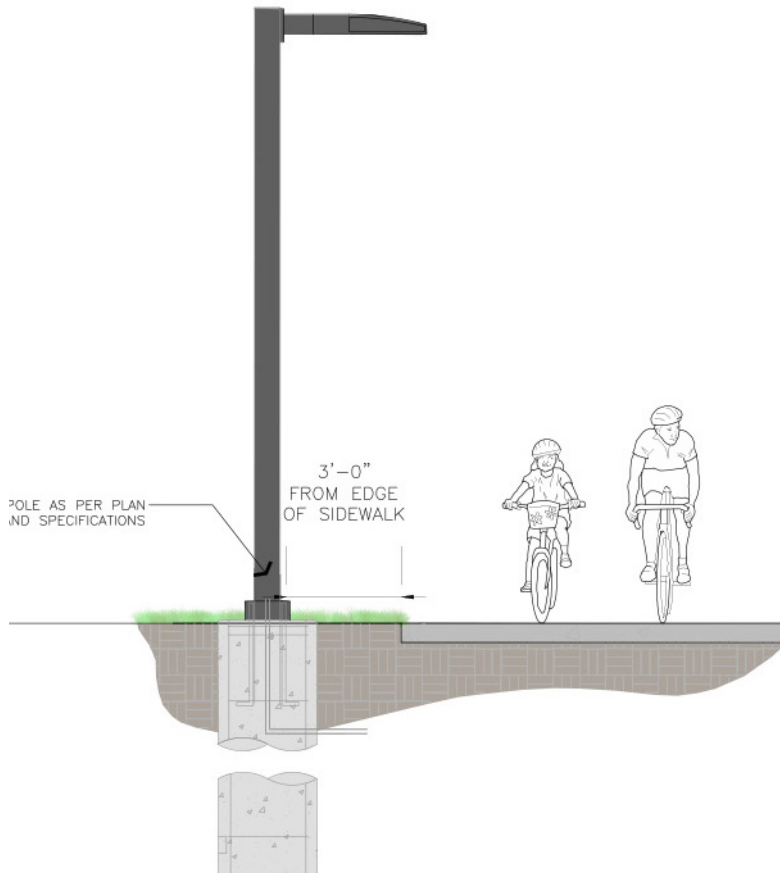
**ONGOING MAINTENANCE ITEMS:**

- Replacement of movable parts when needed (often equipment with movable parts break and need maintenance)
- Wipe down equipment regularly

INDIVIDUAL FITNESS STATIONS



OUTDOOR FITNESS EQUIPMENT



**CONSIDERATIONS FOR LIGHTING:**

There are several levels of lighting to consider when designing public parks. Although most parks are not open at night, during the winter months it can be a nice way to allow for evening use of the park. Lighting & security go hand in hand and should be discussed in the early stages of design.

- Consider lighting for evening use (need enough footcandles for safety) vs. lighting for aesthetics
- Consider motion sensor lighting for conservation
- Consider location of lights and how they affect your neighbors
- Consider security systems such as cameras
- Consider storage space for any camera equipment (this space may require air conditioning)
- Warranty information for all electrical components
- Consider poles and materials used

**ONGOING MAINTENANCE ITEMS:**

- Bulb replacement
- Wipe down of lights regularly to keep light levels at their designed foot candle
- Security monitoring systems



motion sensors | pedestrian path lighting | uplights | security call box | security cameras

**LIGHTING & SECURITY**



## ARCHITECTURAL WELDED WIRE



### COST OF ARCHITECTURAL WELDED WIRE FENCE

6' HT - \$40.00/LINEAR FOOT

## VINYL COATED CHAIN LINK



### COST OF DECORATIVE STEEL FENCE

6' HT - \$30.00/LINEAR FOOT

## CUSTOM STEEL FENCE



### COST OF CUSTOM WORK VARIES

6' HT - \$PRICE CAN VARY

## CONSIDERATIONS FOR PERIMETER BUFFERS:

Perimeter enhancements can be both practical and aesthetic. They often complete the look of a park and can provide necessary barriers between different areas. The biggest difference between the options shown on the left, is price point and lifespan of materials.

- Consider cost vs. lifespan of material
- Consider aesthetics
- Consider height to maximize security

## ONGOING MAINTENANCE ITEMS:

- Brick walls may need to be cleaned and sealed, but this option has the least maintenance. Brick can be a great choice for residential buffers or hiding back of house areas.
- Wood fencing may require replacement of boards periodically, but would likely need total replacement after about 15 years.
- Metal fence options require very little maintenance and are great barriers for dog parks, playgrounds, or other areas that might need containment while still allowing visibility into the space.

## MASONRY WALL



### COST OF BRICK WALL

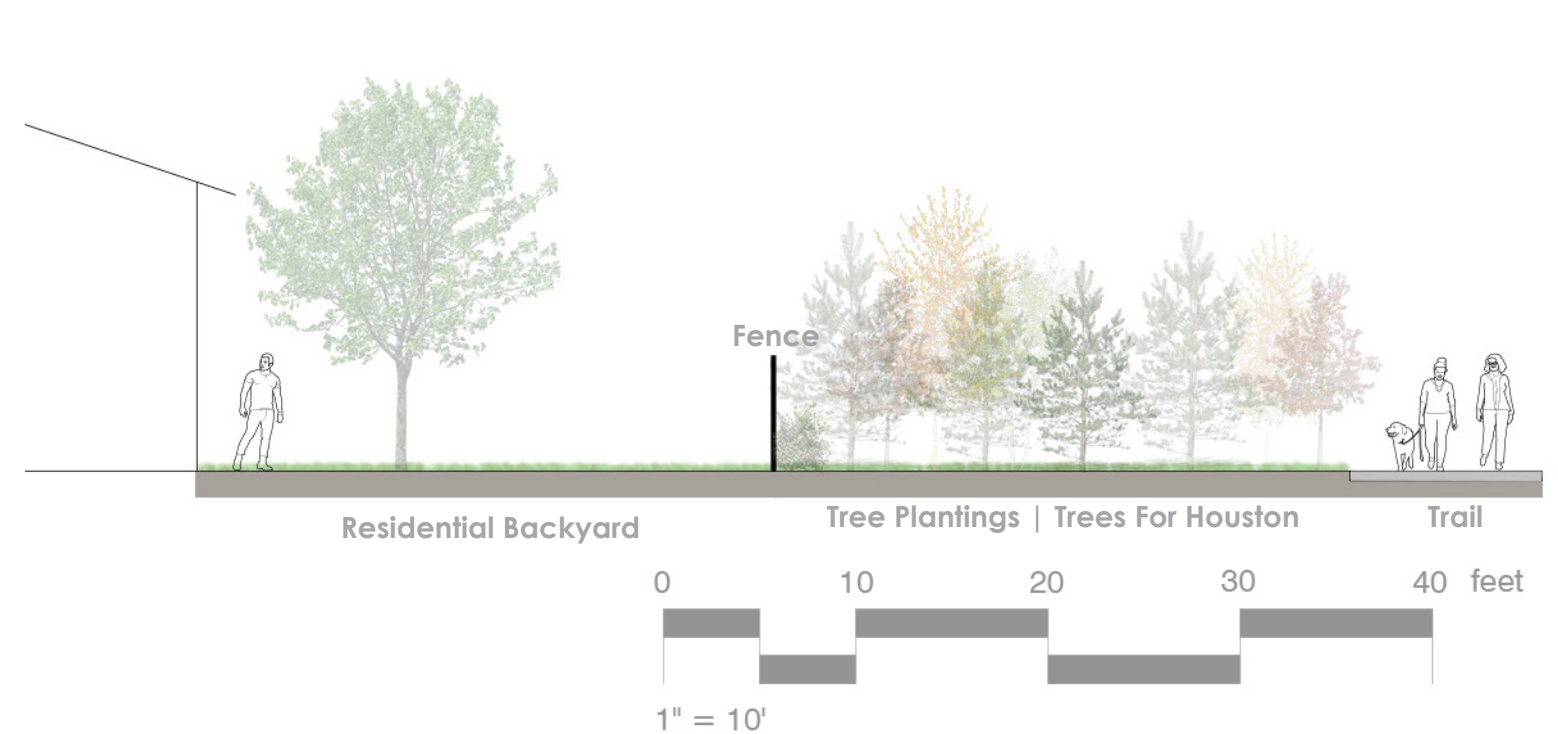
6' HT - \$105.00/LINEAR FOOT  
8' HT - \$135/LINEAR FOOT

## PRIVACY FENCE



### COST OF WOOD FENCE W/ ROT BOARD & CAP

6' HT - \$34.00/LINEAR FOOT  
8' HT - \$42.00/LINEAR FOOT



## PERIMETER BUFFERS



TRAILING LANTANA



GOLD MOUND LANTANA



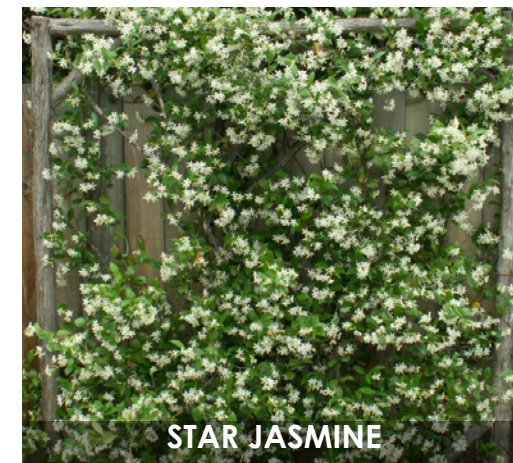
SALVIA



ROSEMARY



VINTAGE JADE DISTYLIUM



STAR JASMINE



SOCIETY GARLIC



RED YUCCA



GULF MUHLY GRASS



MISCANTHUS GRASS



PENNISETUM GRASS



WILDFLOWER MIX



FLAX LILY



LOUISIANA IRIS



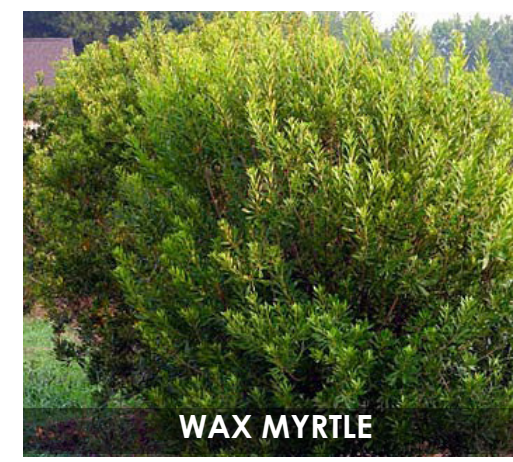
PINEAPPLE GUAVA



DWARF YAUPON



SUNSHINE LIGUSTRUM



WAX MYRTLE



WHITE FRINGE TREE



CRAP MYRTLE



VITEX



OVERCUP OAK



SYCAMORE



LIVE OAK

CONCEPTUAL PLANT PALETTE