



Inclusive Playground and Park Improvements

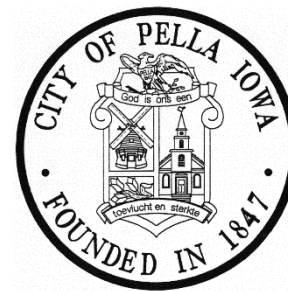
Kiwanis Park





Goals

- What does inclusive mean?
- Master Plan Overview



The need...

- Often considered an underserved population.
- Approx. 13% of children in the United States are served by the Individuals with Disabilities Education Act (IDEA)
- Approx. **1 in 6 Children** in the United States have one or more developmental disability or delay (primarily due to a rise in Autism and ADHD diagnoses)
- Approx. **1 in 4 adults** living in the United States has a disability. (18.5% of Iowa Adult Population)

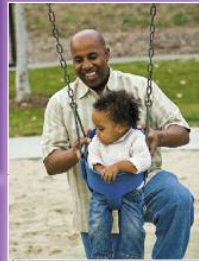


SOURCES:

<https://www.cdc.gov/ncbddd/autism/data.html>
https://www.cdc.gov/ncbddd/disabilityandhealth/impacts/pdfs/Iowa_Disability.pdf
<https://www.cdc.gov/media/releases/2018/p0816-disability.html>
<https://www.disabled-world.com/disability/statistics/1in4.php>
https://nces.ed.gov/programs/coe/indicator_cgg.asp

Safety Standards & Guidelines

Public Playground Safety Handbook



U.S. Consumer Product Safety Commission
Saving Lives and Keeping Families Safe

[CPSC Public Playground Safety Handbook](#)

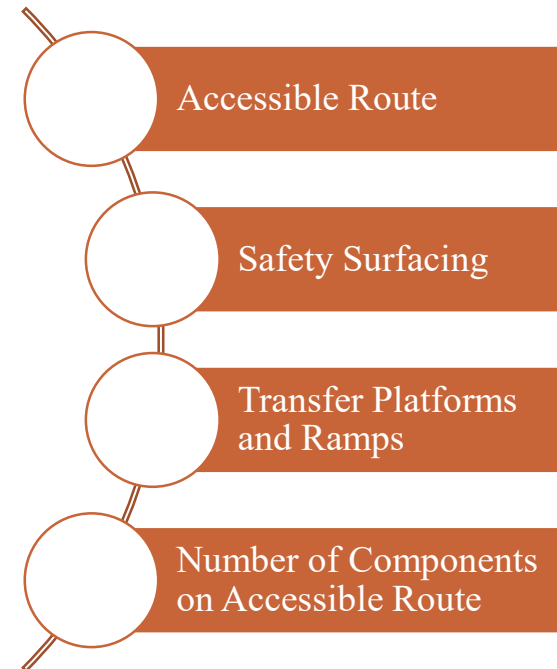
ASTM TECHNICAL PERFORMANCE STANDARDS

- [F1487](#) Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
- [F2373](#) Standard Consumer Safety Performance Specification for Public Use Play Equipment for Children 6 Months through 23 Months.
- [F1292](#) Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
- [F2075](#) Standard Specification for Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment.
- [F2223](#) Standard Guide for ASTM Standards on Playground Surfacing.
- [F2479](#) Standard Guide for Specification, Purchase, Installation and Maintenance of Poured-In-Place Playground Surfacing.
- [F1951](#) Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- [F2049](#) Standard Guide for Fences/Barriers for Public, Commercial, and Multi-Family Residential Use Outdoor Play Areas.

[ASTM Playground Standards](#)

ADA Requirements

- 1990 Americans with Disabilities Act
- 2010 ADA Standards for Accessible Design (SAD)
- **Who Must Comply:** Federal, State and Local Governments, Those Providing Public Accommodations and Commercial Facilities
- **ADA or Accessible Design are sites which comply with the minimum standards** set by the Americans with Disabilities Act Architectural Barriers Act.
- These standards focus on the functional limitations of those with various environmental and/or communication disabilities.
- **The standards for play areas primarily focus on physical access to play activities/components.**

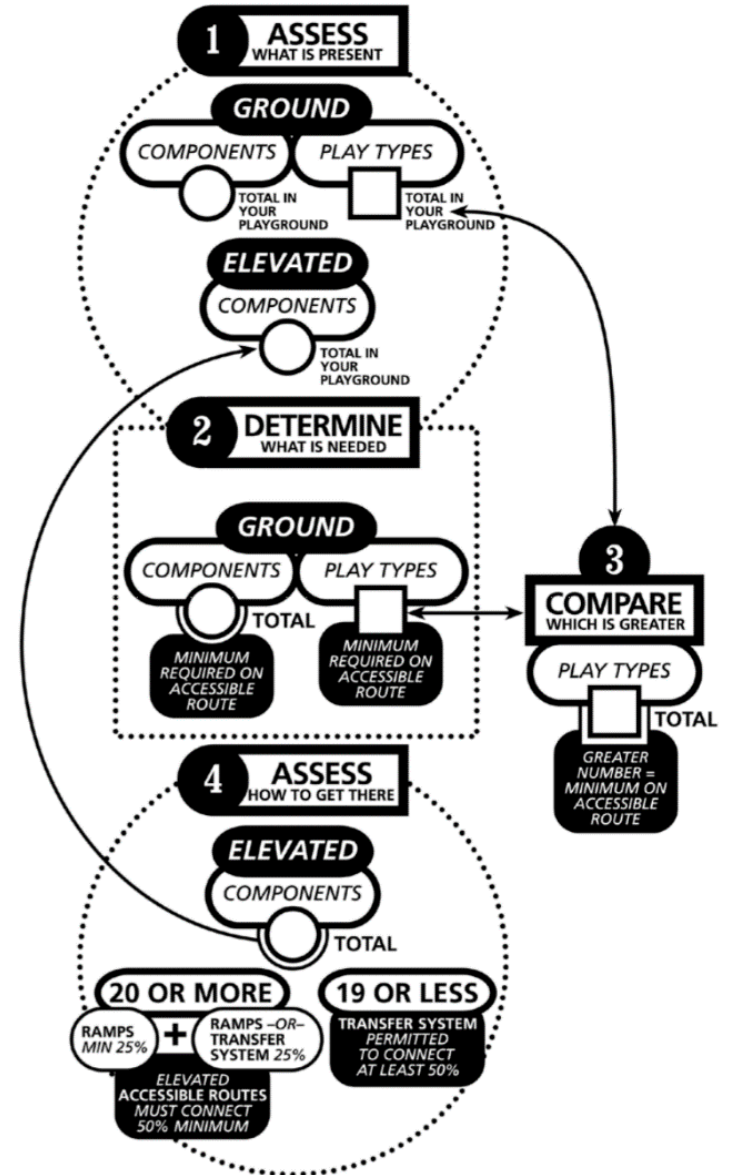


The numbers game

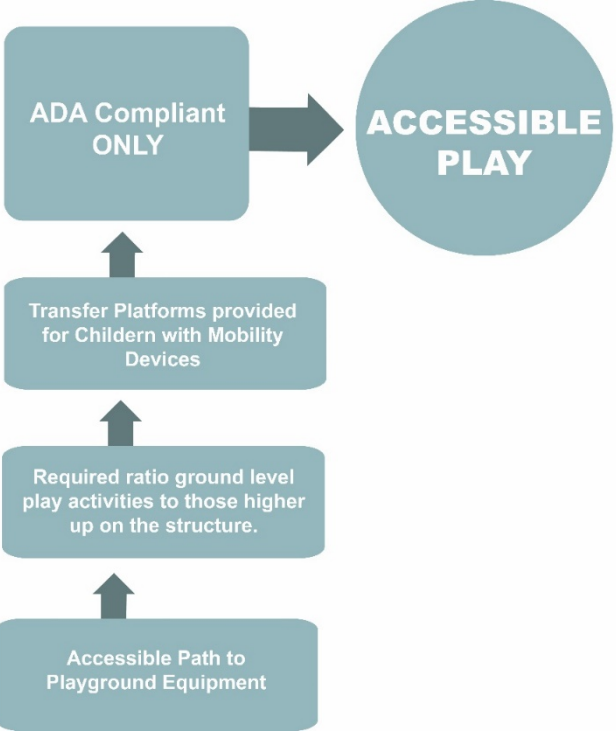
- U.S. ACCESS BOARD GUIDE: A Summary of Accessibility Guidelines for Play Areas by U.S. Access Board

Table 240.2.1.2

Number of elevated play components provided	Minimum number of ground-level play components required to be on accessible route	Minimum number of different types of ground-level play components required to be on accessible route
1	Not applicable	Not applicable
2 to 4	1	1
5 to 7	2	2
8 to 10	3	3
11 to 13	4	3
14 to 16	5	3
17 to 19	6	3
20 to 22	7	4
23 to 25	8	4
More than 25	8 plus 1 for each additional 3 over 25, or fraction thereof	5



Ta-da!





Inclusive Play

Kiwanis Park

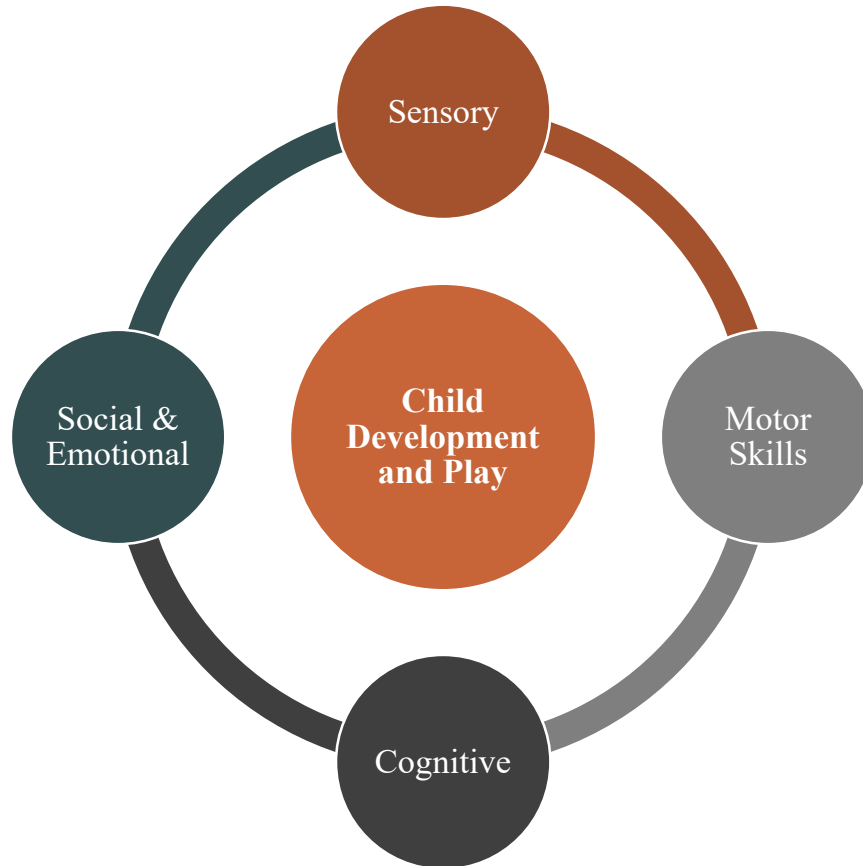


Why do we include playgrounds in our parks?



Photo Credit: Gametime, Berliner and Landscape Structures

The Importance of **Play:**

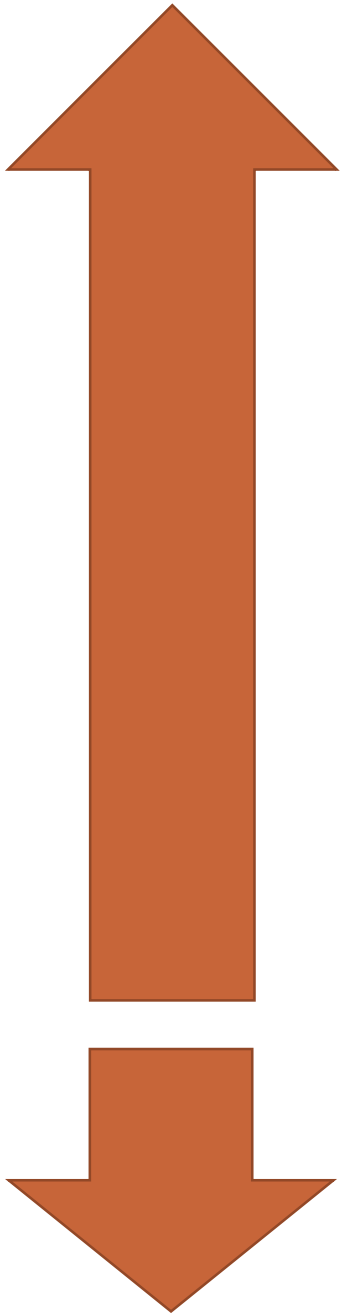


All kids benefit from exploring four defined areas of developmental skills when at play.

"The experience of experiencing something for the first time: I hate it, or I love it; I never want to do it again, or I want to do it again and again; can I replicate it if I like it, or can I do it differently next time—spin faster, slower, hold on tighter. This is why playgrounds need options for kids."

Ingrid Kanics, OTR/L
Kanics Inclusive Design Services, LLC

It is important for inclusive playgrounds to provide a variety of developmental options for kids to choose from based on their skill level and abilities.



Inclusive Playgrounds:

- Goes beyond minimum accessibility standards and providing facilities for those with physical disabilities.
- Playground offers many opportunities for all children to develop cognitive, sensory, physical and social skills.
- Designed to be welcoming, engaging and challenging for all children.
- The place is welcoming to parents and caregivers whom themselves may have a disability.
- Feature a variety of environments where children can engage at their own pace and sensory input level.

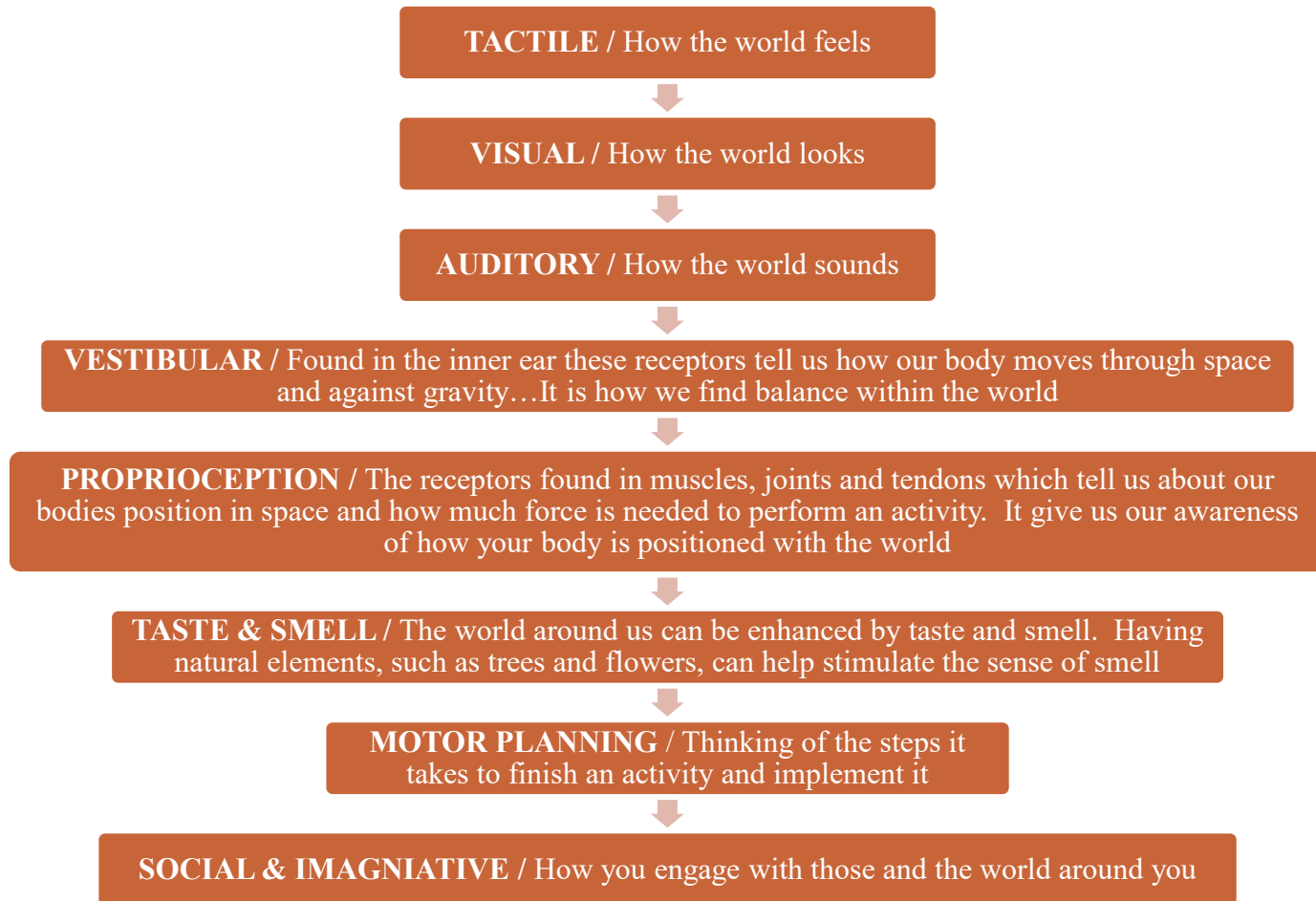
Inclusive Playground Myth:

- They are playgrounds with a lot of ramps and little challenge for others.
- They are too expensive to build.

The Work of
Play:
Inclusive
Playgrounds
recognize the
importance of play in
a child's development
and understanding of
social equity.

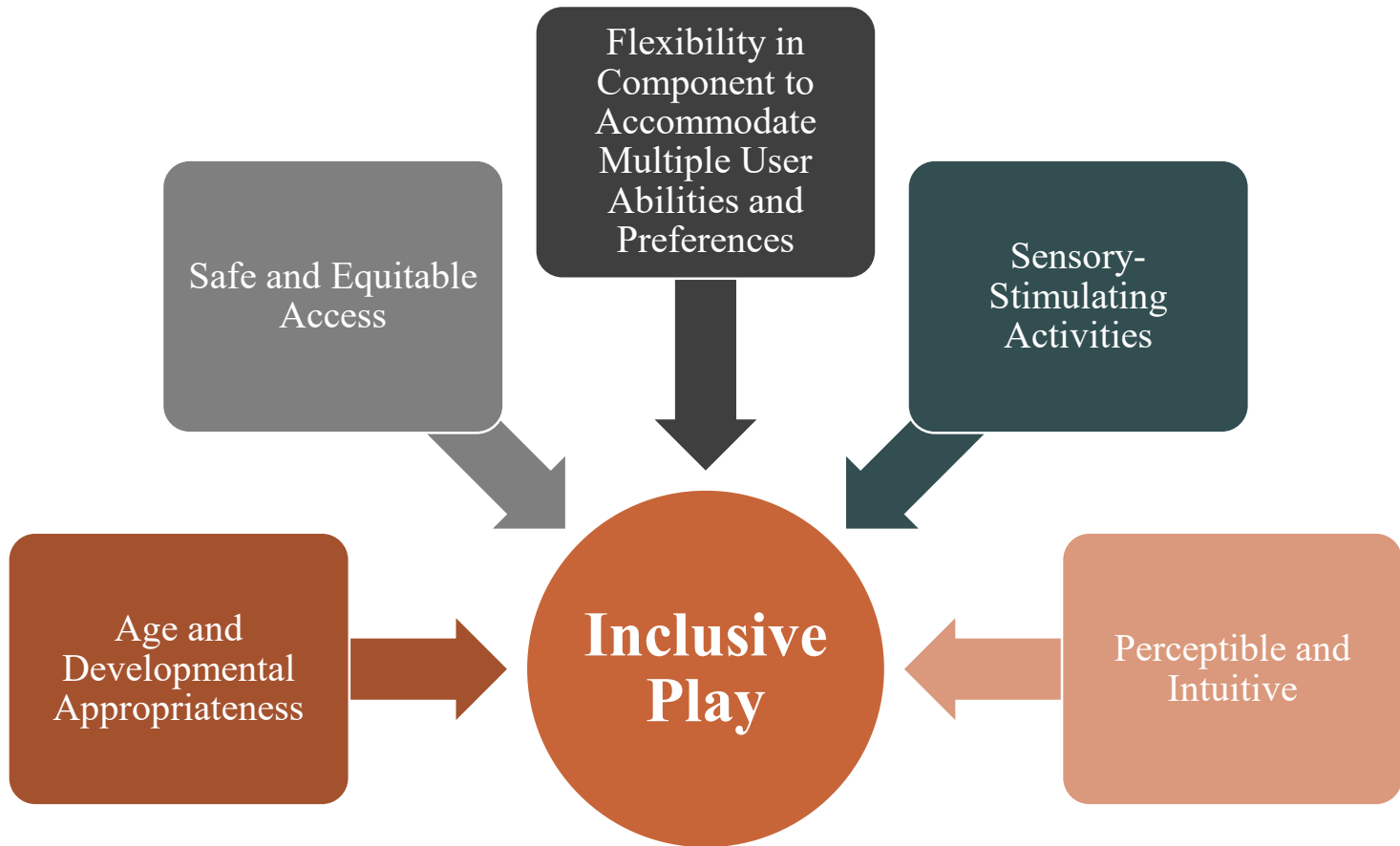
The Importance of **Sensory Play:**

Through the senses children discover their world and develop skills necessary to be successful in it. A play area that helps facility a variety of sensory experiences are more mutually engaging and encourage children of various ages and abilities to play together.



Principles of Inclusive Design

Centered on the belief – All children should benefit from playgrounds





The Master Plan

Kiwanis Park Improvements

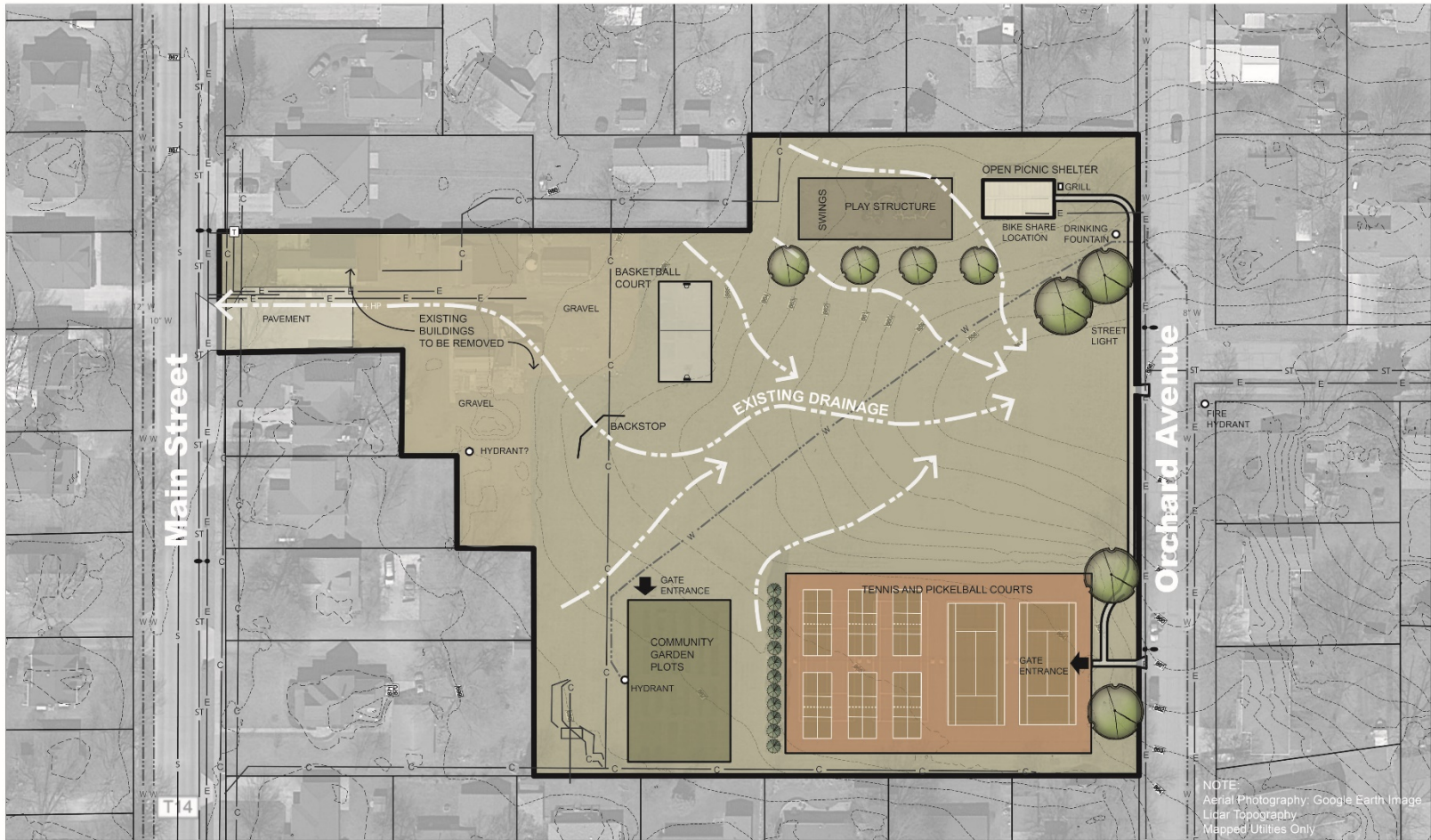




Kiwanis Park Site Specific Criteria

- Consideration of Existing Site Uses
- Consideration of Surroundings
- Pella's Unique Character

EXISTING CONDITIONS MAPPING



Kiwanis Park Master Plan

City of Pella, Iowa

EXISTING SITE CONDITIONS

October 15, 2019

SITE ANALYSIS SUMMARY

- **Consideration of Existing Site Use:**

- A neighborhood park with a existing recreation features.
- Picnic Shelter, Playground, Basketball, Tennis and Pickle Ball
- Large Multi-Use Open Space

- **Surroundings:**

- Residential properties on all sides.
- Limited visibility and access from Main Street

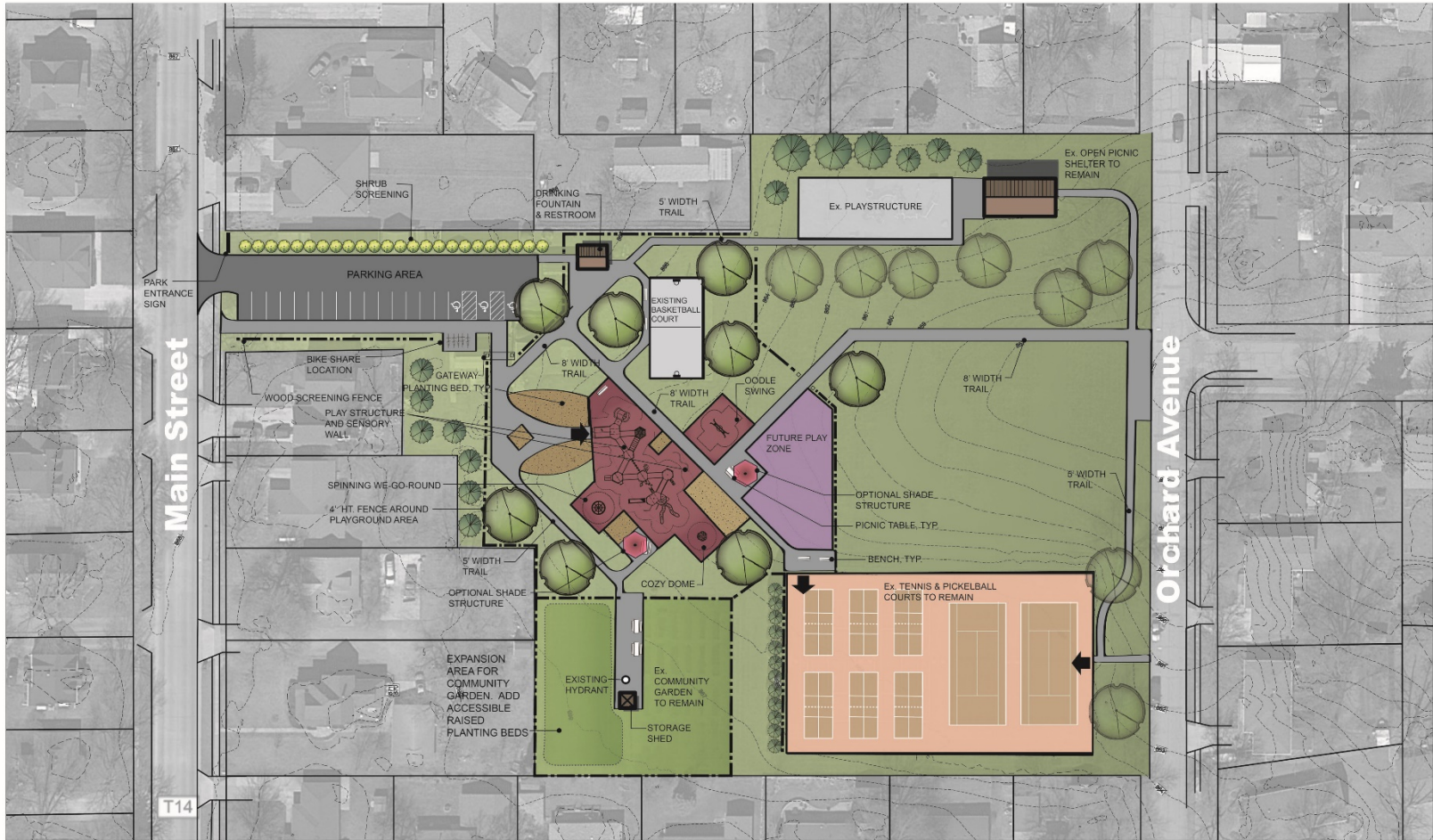
- **Other Needs to Consider:**

- Restroom Facility
- Drinking Fountains
- Access to Shade
- Overall Site Connectivity and Accessibility

- **Impact Concerns:**

- Traffic and Parking
- Stormwater
- Noise
- Visual Impacts
- Lighting

MASTER PLAN



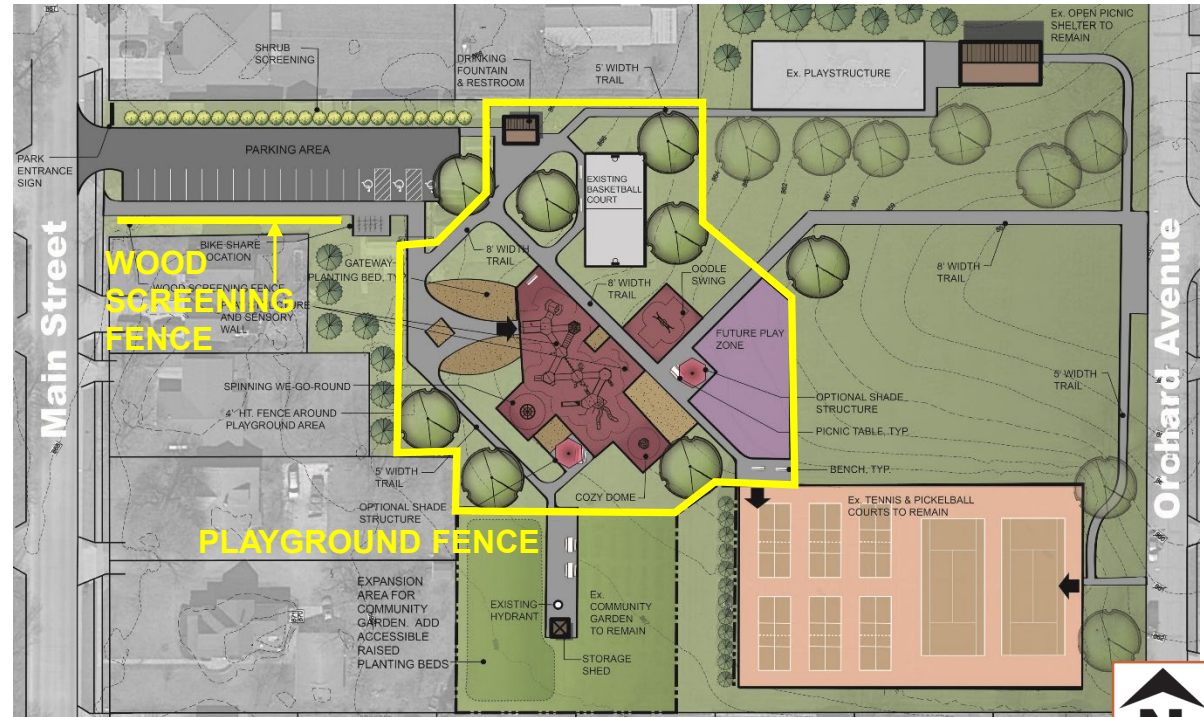
Kiwanis Park Improvements

City of Pella, Iowa

MASTER PLAN

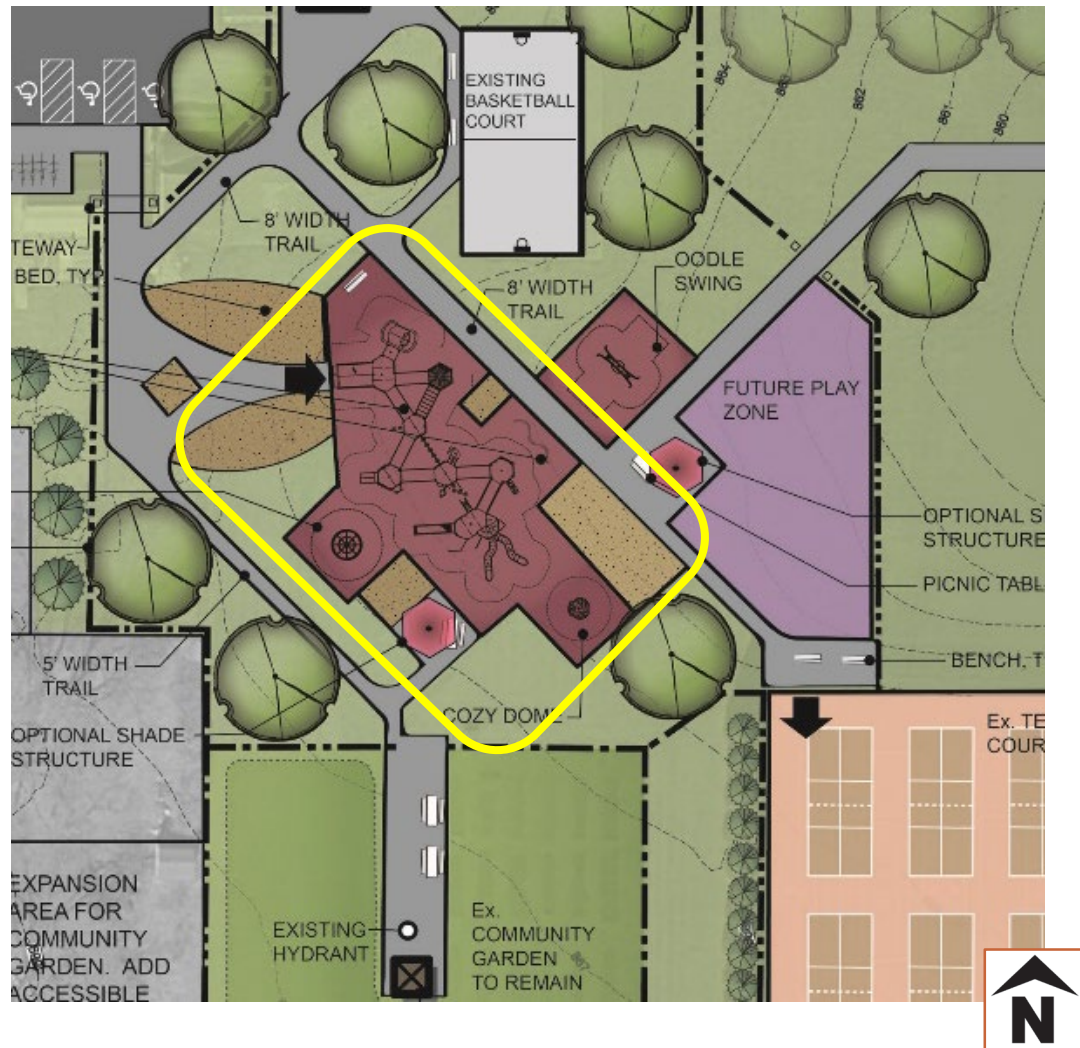
October 15, 2019

MASTER PLAN – Fencing and Safety



MASTER PLAN – 5-12 Year Old Children

- Large play structures encourage continuous play.



MASTER PLAN – 5-12 Year Old Children

- Various Levels of Challenge
- Unique Pella Theme
- Contrast of Colors
- Diversity of Play Events
 - Slides
 - Balance Events
 - Upper Body Events
 - Movement
 - Sensory Panels
- Children love to climb and conquer. It helps create “Sensory-motor intelligence” and “visual spatial perception”. They help develop focus and motor planning skills.
- Sliding is a sensory rich experience. Children use their visual and vestibular systems to understand speed and pressure needed to slow down. They develop balance and motor planning skills.



MASTER PLAN – Diversity of Opportunities



MASTER PLAN – Side by Side Play



MASTER PLAN – Touch and Sound

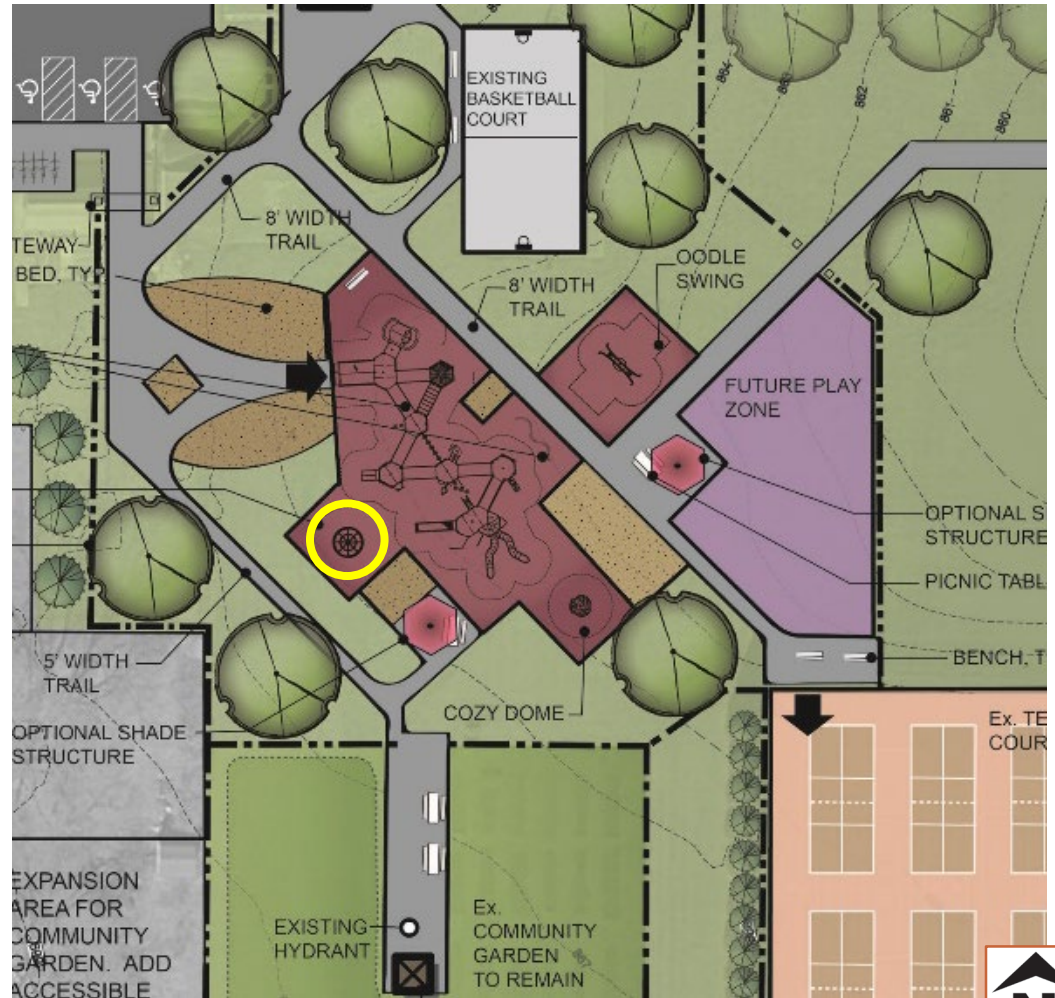


MASTER PLAN – Movement



MASTER PLAN – Spinning

- Spinning is considered a core movement that engages the vestibular receptors
- It helps children develop valuable equilibrium information
- We-Go-Round Wheelchair Accessible Merry-go-round

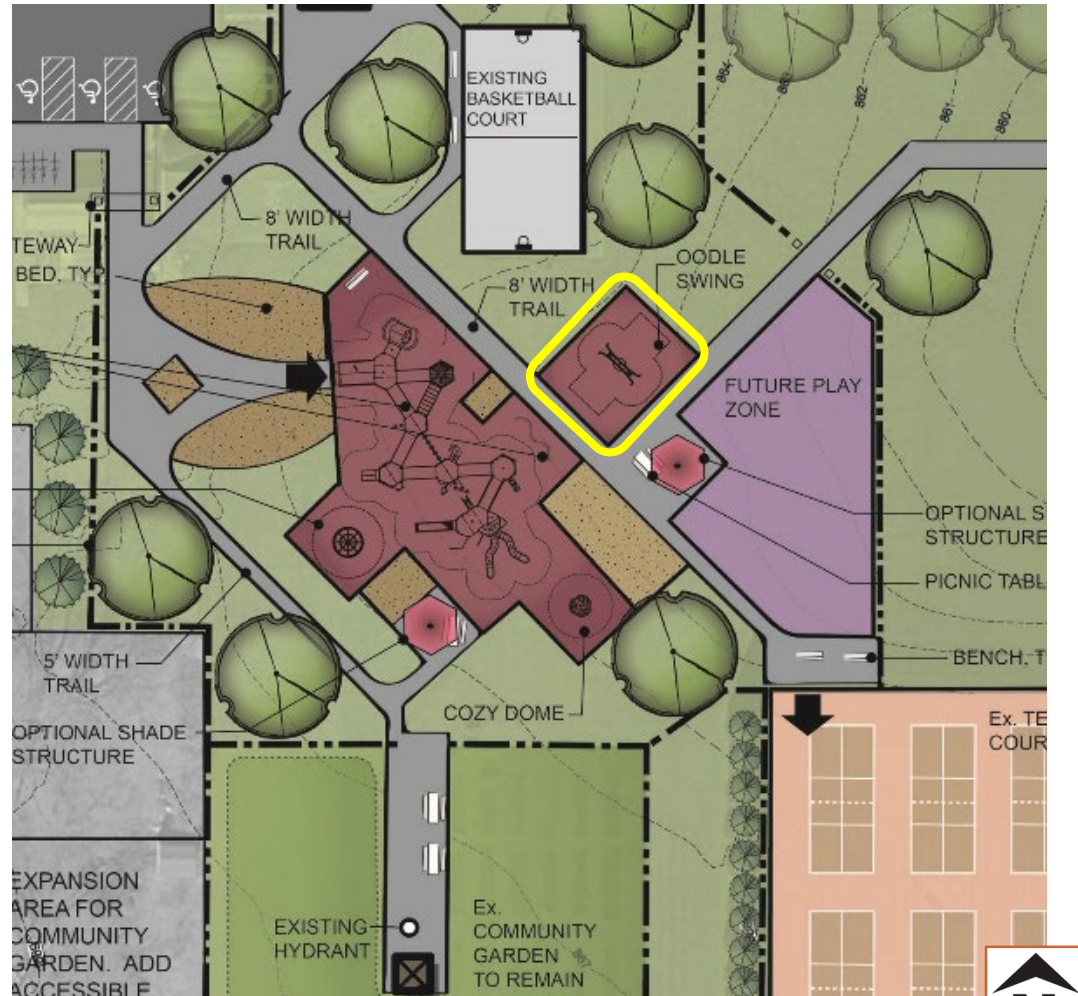


MASTER PLAN – Swinging

- Swings help children develop their nervous system and motor planning using visual, vestibular and proprioceptive information.
- Transfer Accessible Multi-User Oodle Swing

FUTURE POTENTIAL ADDS:

- Belt Swings (5-12 year olds) on Solid Safety Surface
- Toddler Bucket Seats, Tandem Swing
- Accessible Molded Bucket Seats with Back Support

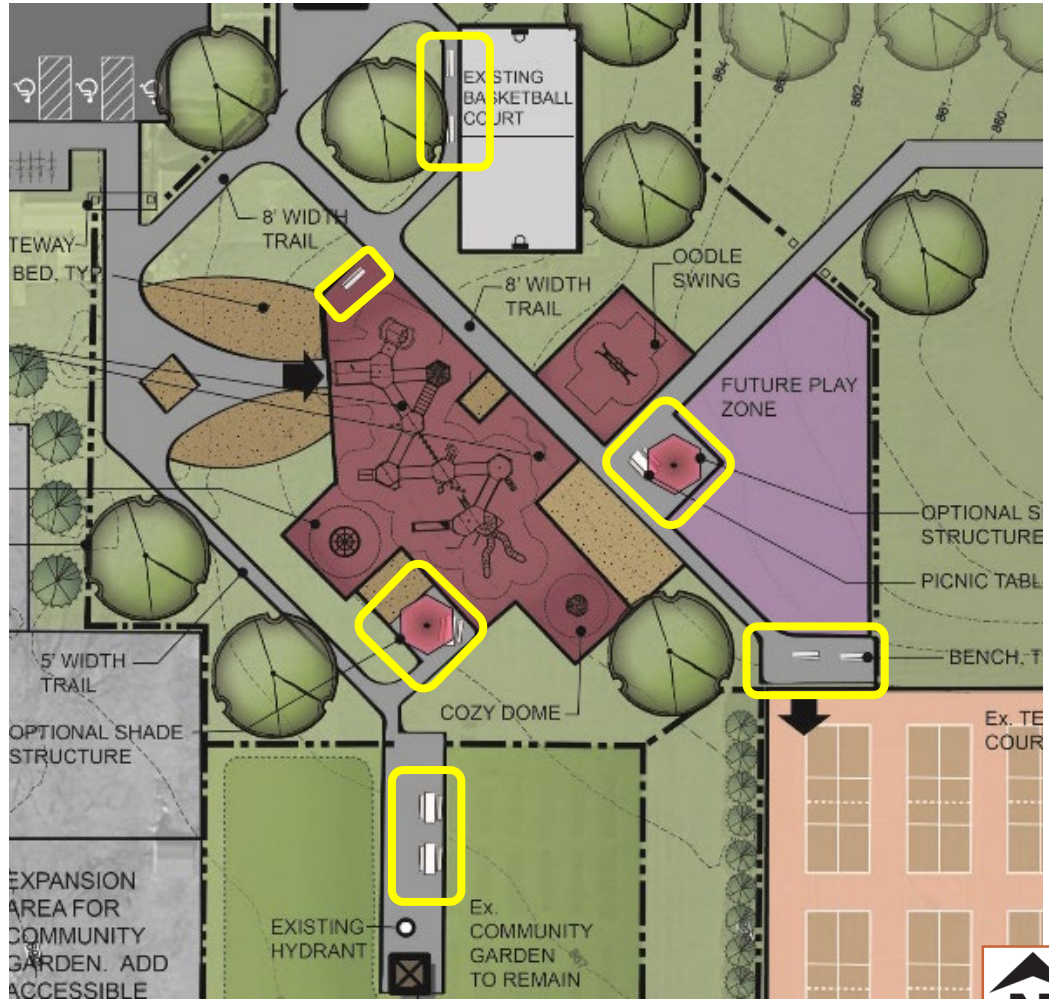


MASTER PLAN – Cozy Nook

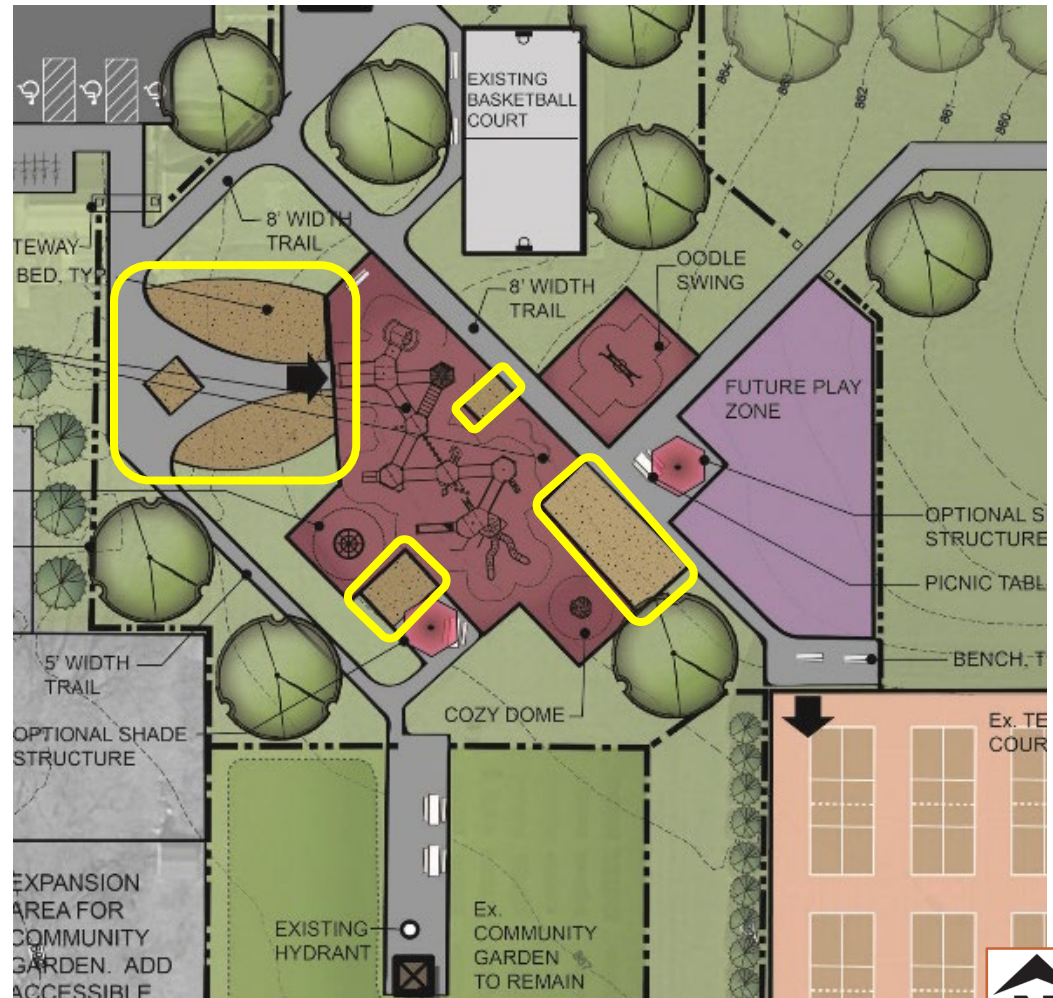
- Cozy Dome provides a quiet space for sensory exploration and a place to go if a child becomes overloaded by activity elsewhere on the playground.
- It has multiple levels of play value including encouraging tactile sensory experiences and climbing.
- Provides good sight lines.



MASTER PLAN – Shade and Seating Areas



MASTER PLAN – Planting Beds

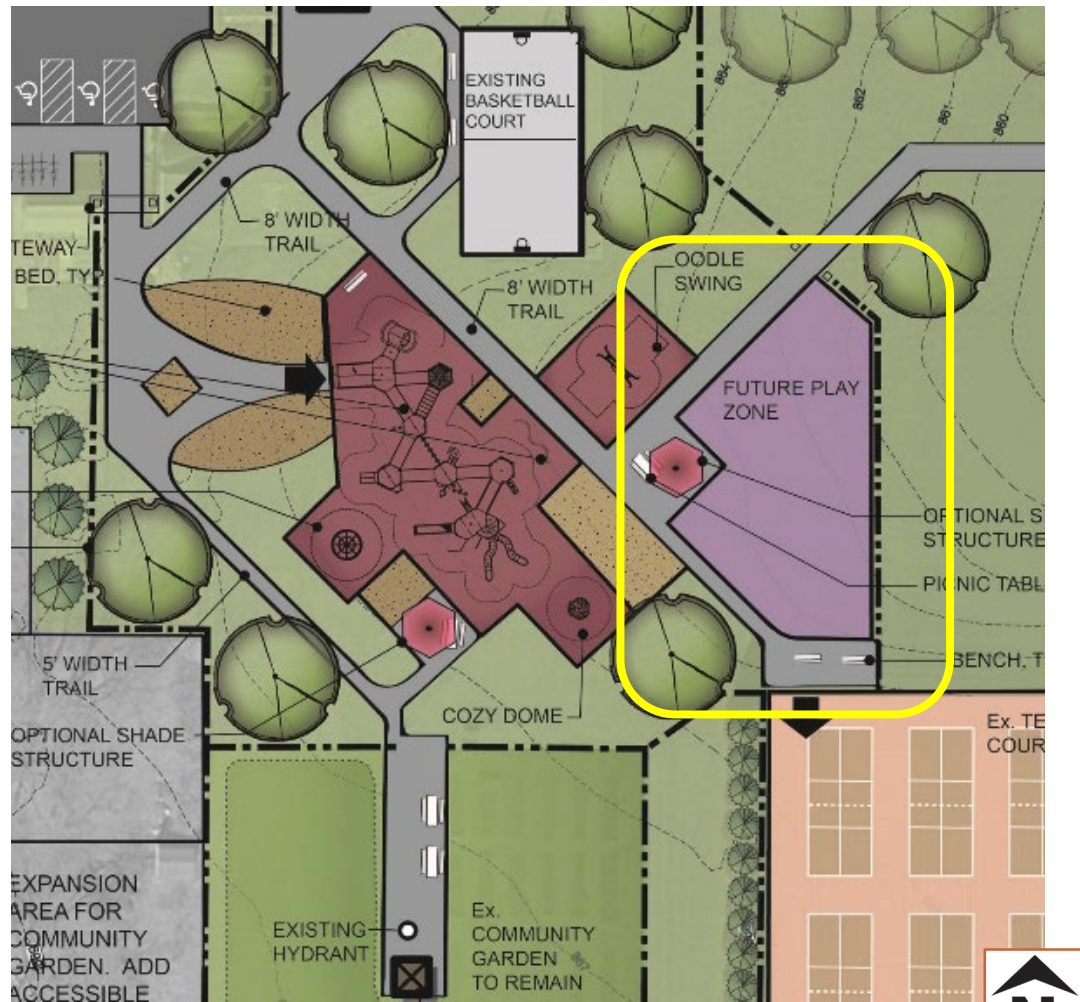


MASTER PLAN – Future Play Zone

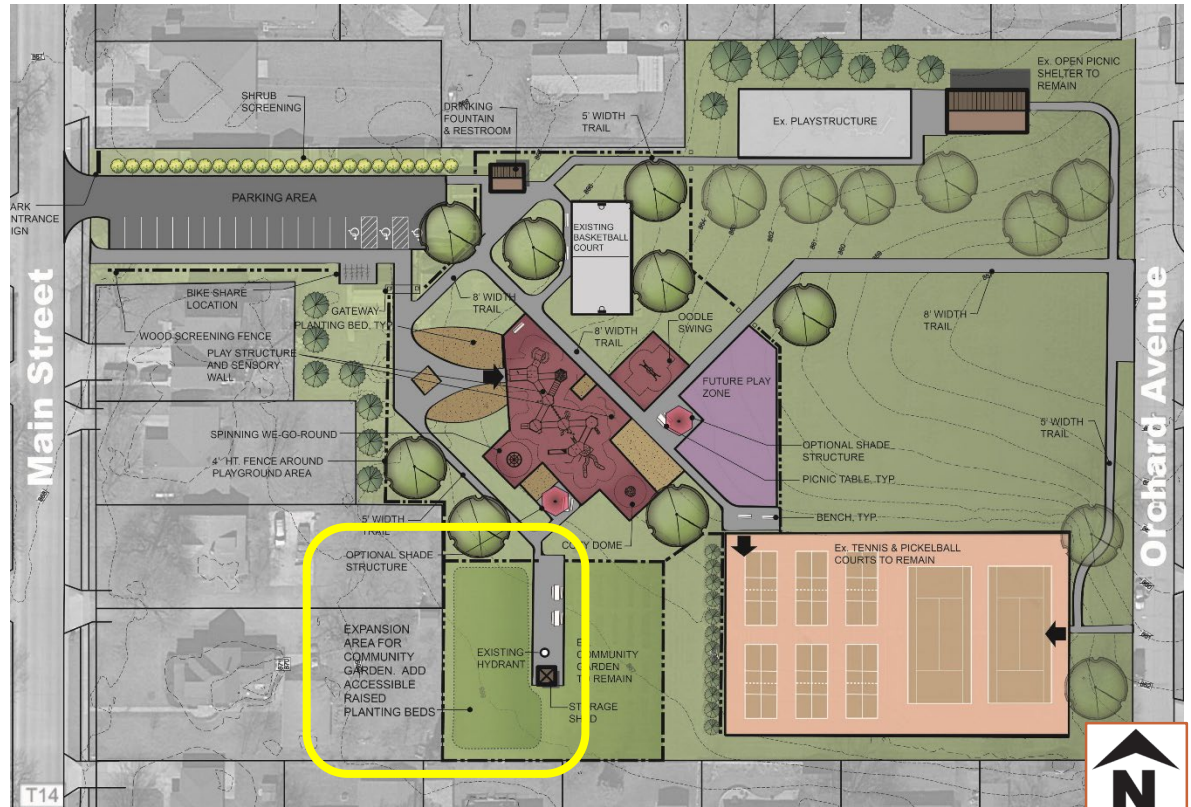
- Area to add additional play features.

FOR EXAMPLE

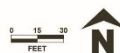
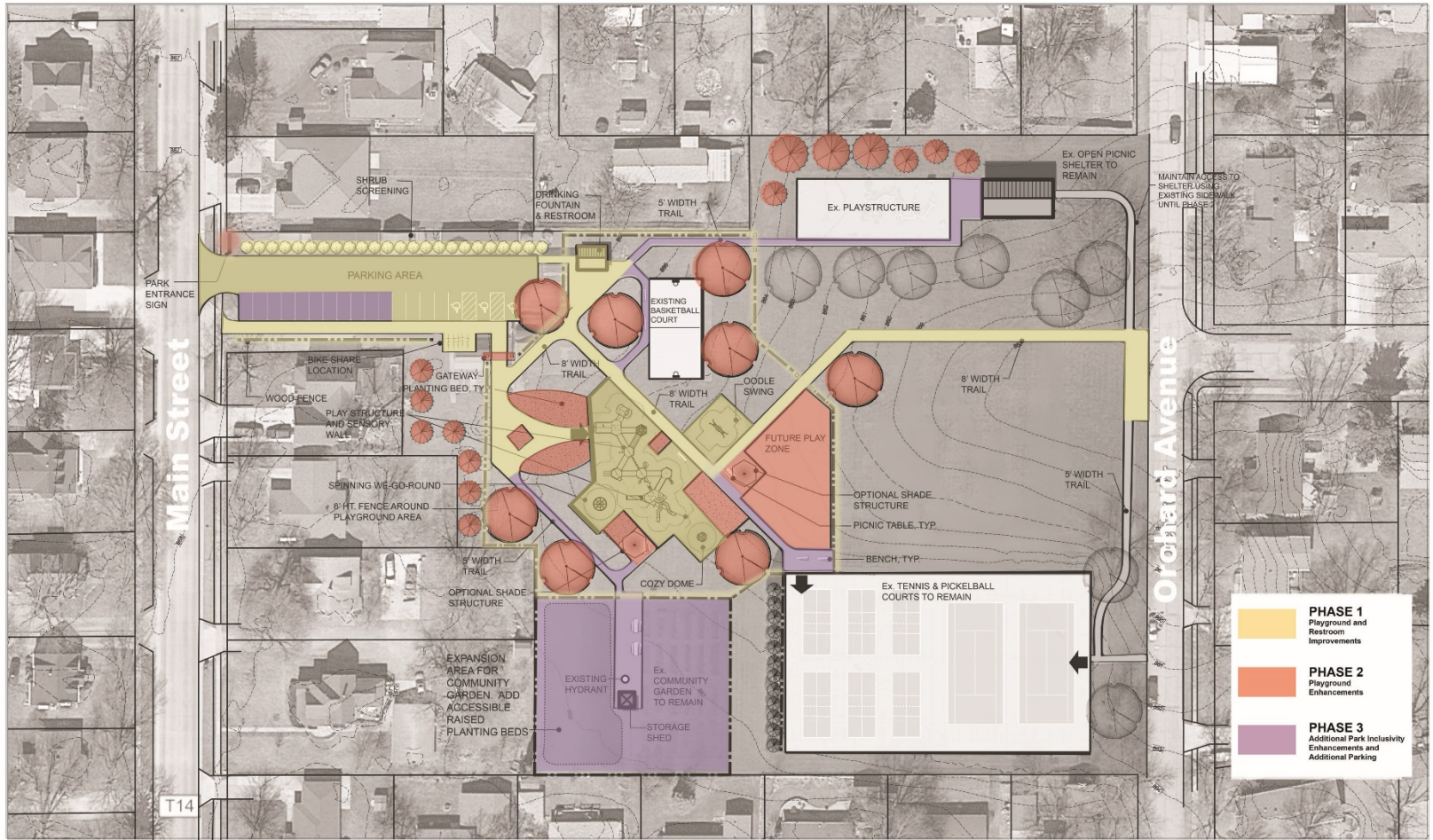
- Additional Swings
- Play Area for 2-5 Year Olds
- Play Area for 6 months to 2 Years
- Additional Sensory Play Features



MASTER PLAN – COMMUNITY GARDEN



MASTER PLAN – PHASING



Kiwanis Park Improvements

City of Pella, Iowa

PHASING PLAN

October 15, 2019

MASTER PLAN – COST ESTIMATE

PHASE I: PLAYGROUND AND RESTROOM IMPROVEMENTS

- \$1,168,000

PHASE II: PLAYGROUND ENHANCEMENTS

- \$651,000

PHASE III: ADDITIONAL PARK INCLUSIVITY AND PARKING IMPROV.

- \$124,000



THANK YOU

