



In collaboration with



SCI Engineering, Inc.



CITY OF ST. CHARLES PARKS & RECREATION

200 Acre Park/School Master Plan

August 2021

ACKNOWLEDGEMENTS

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FELIPE DENARVAEZ | PROJECT MANAGER

BRIANA COLEMAN | DESIGNER

SCOTT KOLKMEYER | P.E.



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APPENDIX A	OPEN HOUSE DOCUMENTS
APPENDIX B	ONLINE SURVEYS
APPENDIX C	PRESENTATIONS

In 2020, the City of St. Charles acquired a 97.3-acre parcel north of the City at the intersection of Highway 94 and Highway B, adjacent to a 96.9-acre parcel owned by the Orchard Farm School District (OFSD). While developing plans for each parcel the City and School District worked together identifying shared use opportunities and division of the approximately 200 acres.

Through joint-board meetings and design team coordination the overall master plan process was collaborative in nature. The new park master plan and high school plans explored opportunities for shared parking, stormwater management, trail connections, educational curriculum, and athletic programming. As the new park and school district campus continue to advance, these 200-acres will become a destination within the rapidly growing community.

The City of St. Charles has identified 2,600 acres north of Highway B as the City’s best opportunity for large-scale growth, and this park will be a central amenity driving, and supporting, this growth and providing a catalyst for economic development. The community driven planning process utilized by the Department of Parks & Recreation helps to ensure that the new park will complement the existing park system and provide desired amenities.

The new park master plan envisions unique amenities for residents and a foundation for sports tourism, surrounded by passive elements and spaces to retreat into nature. The design is driven by community feedback and is framed in the context of the new school campus and surrounding neighborhoods. The anchoring communities to the south of the new park site, combined with the potential growth to the north, positions this new park to be a significant destination within the City of St. Charles.

1 EXECUTIVE SUMMARY

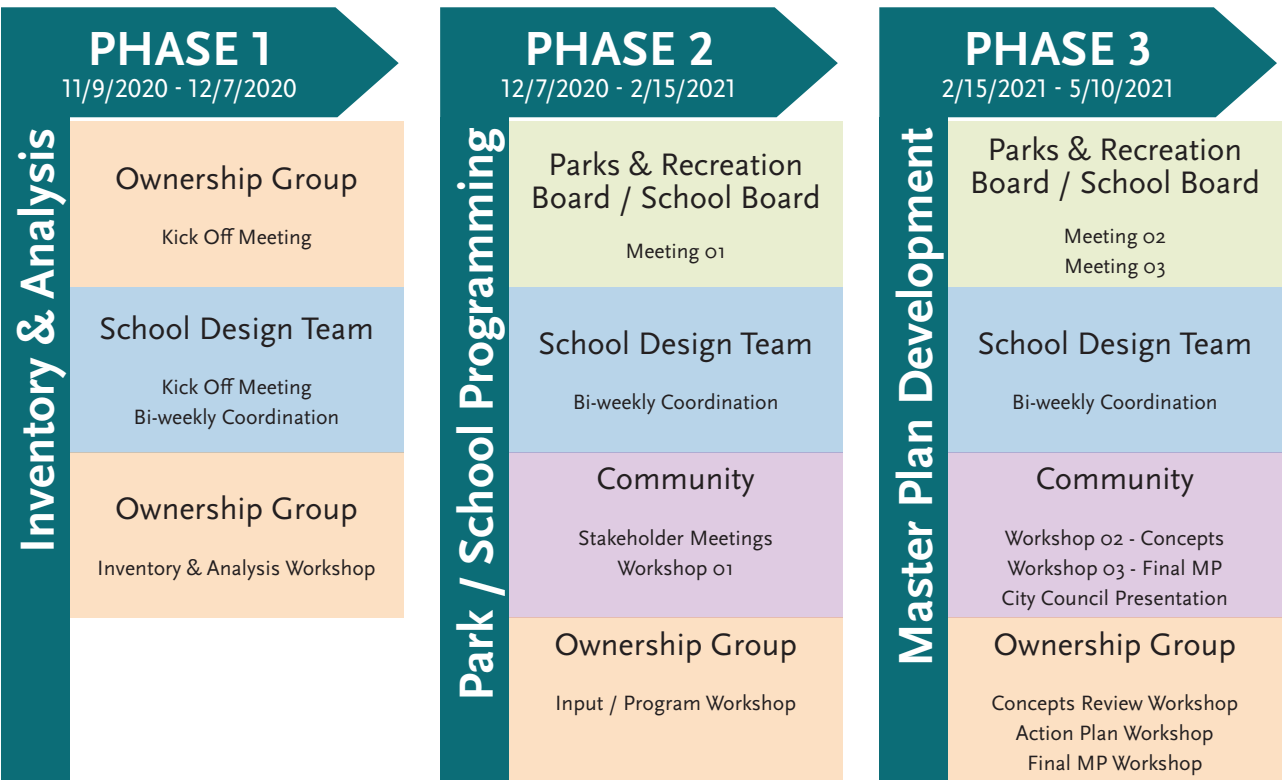
INTRODUCTION

The City of St. Charles Parks & Recreation Department hired SWT Design to lead the development of a master plan for the new 100-acre park property. Over the course of nine months, the master plan process evaluated the existing land, gathered community feedback, developed concepts, and consolidated a final vision for the City's newest park. This report provides an overview of the planning process and a foundation for implementation strategies to meet the needs of the City of St. Charles Parks & Recreation Department and desires of the community.

INTRODUCTION AND BACKGROUND

The City of St. Charles Parks & Recreation Department acquired approximately 100 acres of land north of the City. This new property, adjacent to a parcel owned by the Orchard Farm School District, provided the opportunity to envision a new park from scratch. The master plan process identifies existing conditions, community desires and park system needs framed within the context of the City's future growth. Through collaboration with the OFSD's design team and community feedback, the master plan provides guidelines for implementation. The new park, combined with the OFSD campus, provide a catalyst for investment and anchor the City's expansion.

Below is an overview of the master planning process and to the right are summaries of the goals identified for the park and potential shared amenities identified with Orchard Farm School District. The following page shows an overview of the two parcels.

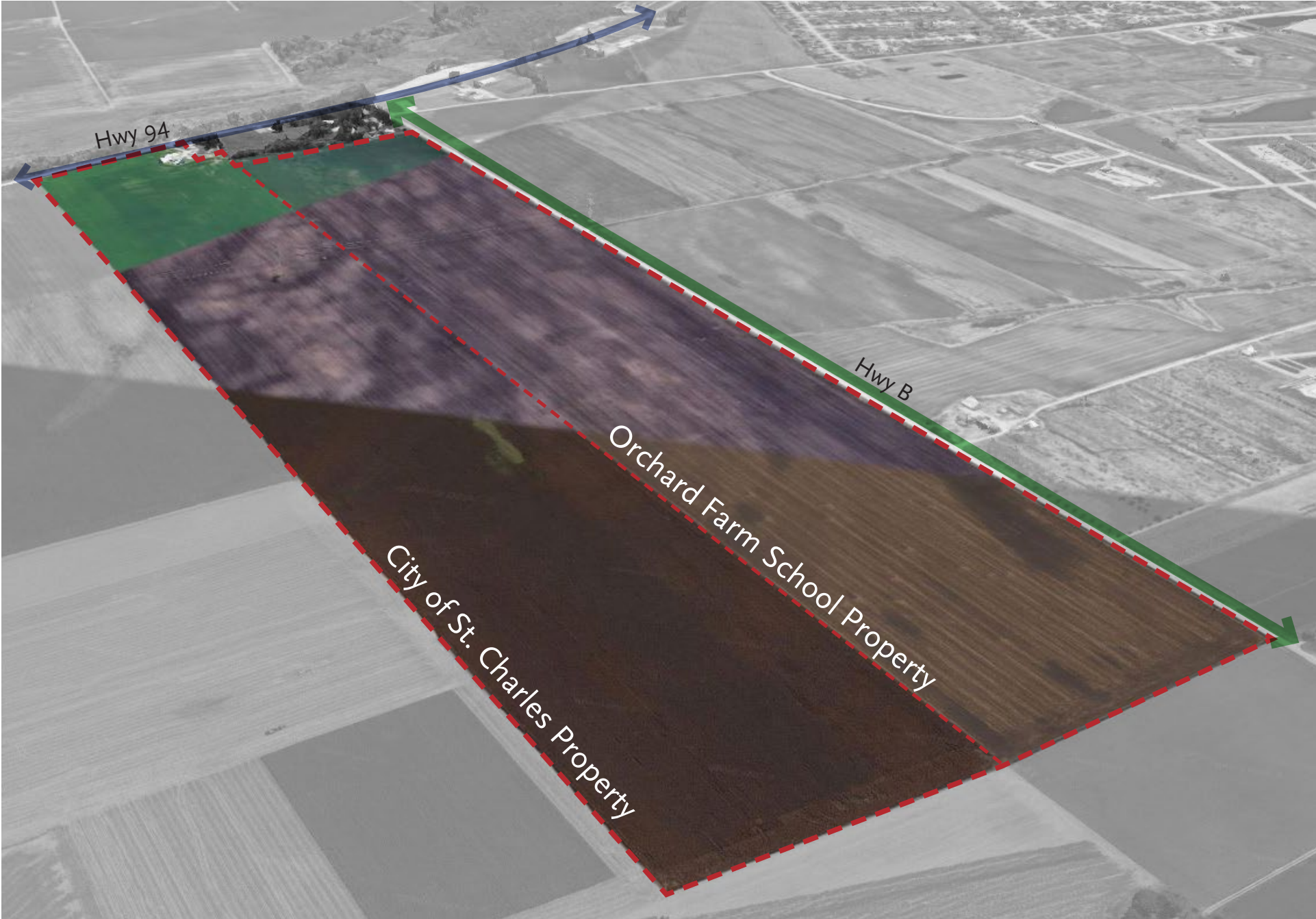


PARK MASTER PLAN GOALS

- Community input driven vision for a new park
- Multi-generational
- Compliment and expand park system
- Explore shared amenities with High School
- Plan for implementation phasing

CONSIDERATIONS FOR SHARED AMENITIES

- Athletic Fields
- Outdoor Curriculum in Parks
- Trail Network(s)
- Vehicular Circulation and Parking
- Pavilions and Shelters
- Unprogrammed Open Space
- Landscape and Stormwater BMP



INVENTORY & ANALYSIS

When considering how the new park and school campus might work together, the entire 200 acres of new property was evaluated. Both parcels were farmland with no previous development. The eastern half of the property is bisected by overhead powerlines and underground gas lines. The southeast corner at the intersection of Highway 94 and Highway B remains private property.

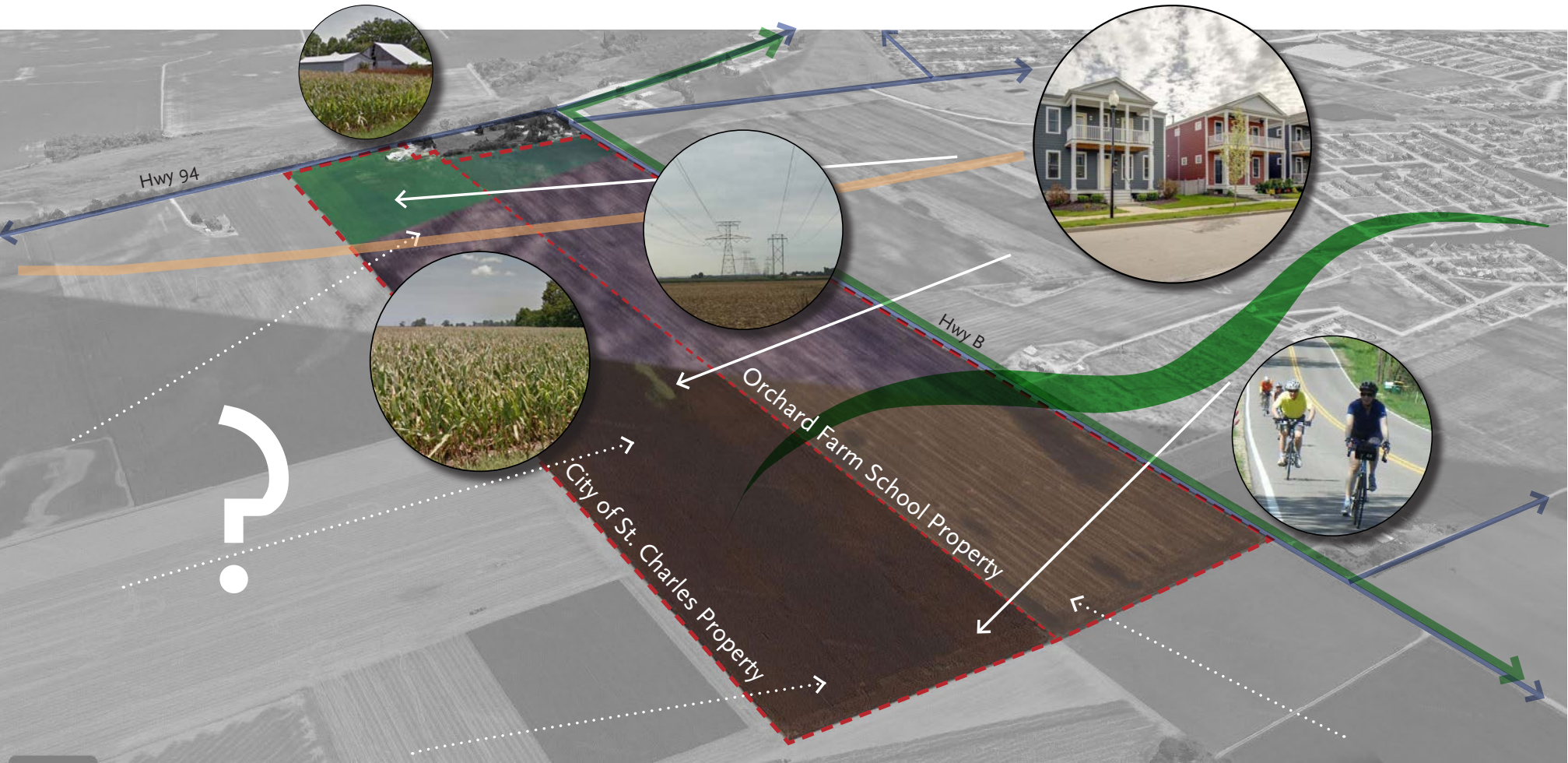
ISSUES & OPPORTUNITIES

Issues

- Property Configuration
- Overhead Power Lines
- Agriculture / 500-yr. Flood Plain
- Identity / Security
- Location

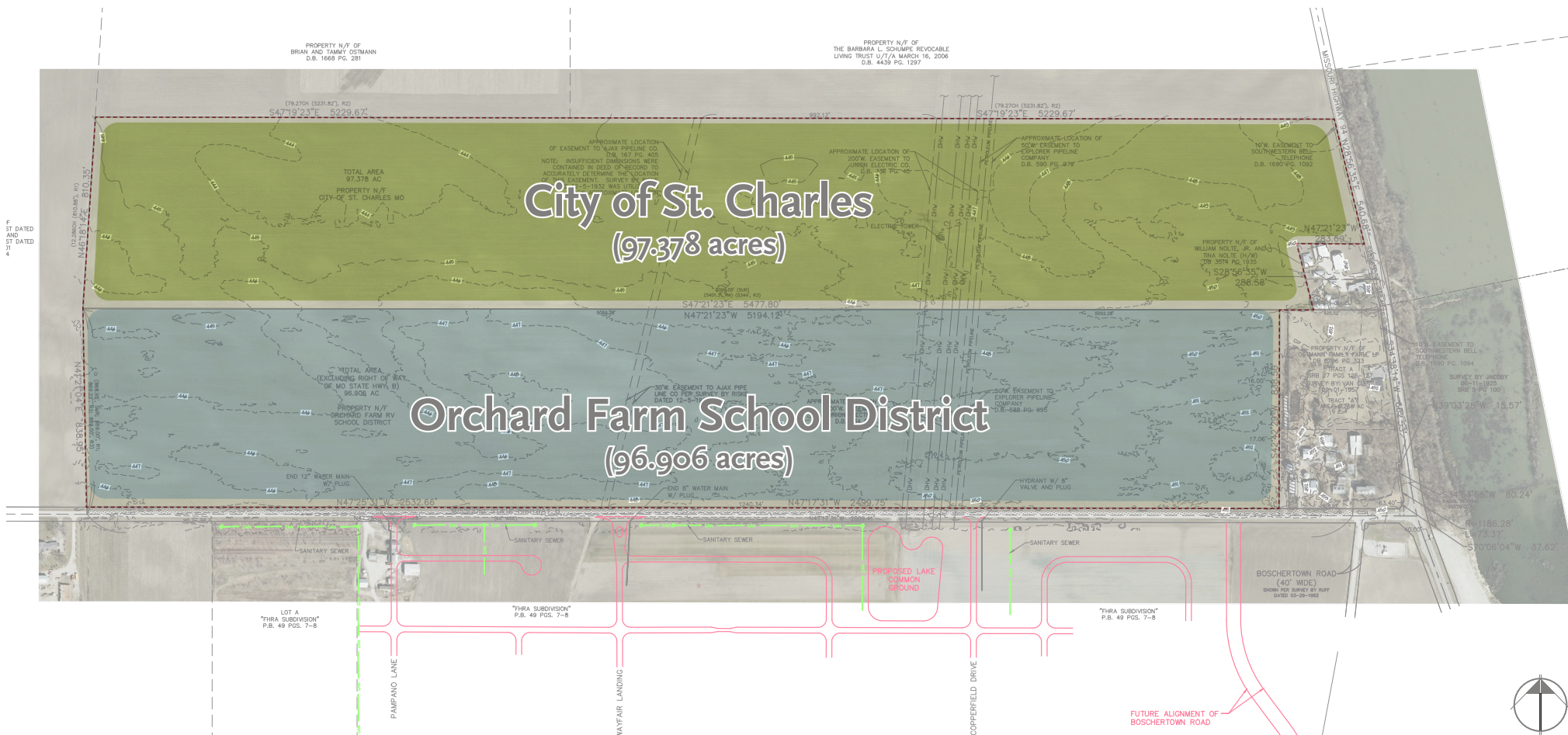
Opportunities

- Connectivity
- Expanded Parks System
- Shared Offerings / Infrastructure
- Preservation
- “Issues”



PROPERTY OVERVIEW

The property acquired by the City of St. Charles was rectangular in shape with a length of 5,229 feet along the north boundary and a width of 810 feet along the west boundary. Road access to the property is from Highway 94 on the east boundary. The rectilinear form of the property limited design opportunities and ease of circulation. Through collaboration with the Orchard Farm School District, the two properties were redivided to maximize the potential and access of each site.





MCNAIR PARK 98 Acres

- McNair Aquatic Facility
- 3 Playground Areas
- Braille Trail
- In-line hockey
- Full Size Basketball Court
- Sand Volleyball Court
- 4 Tennis/Pickleball Courts
- 6 Softball Diamonds
- 2 Soccer Fields
- 1 Football Field (Seasonal)
- Cross Country Course
- Little Library
- Gazebo
- Paved hiking/biking Trail
- Restrooms open year round



WAPELHORST PARK 73.5 Acres

- 78 Acres
- Wapelhorst Aquatic Facility
- Playground Area
- 4 Softball Diamonds
- 2 Soccer Fields
- 2 Tennis/Pickleball Courts
- 3 Picnic Shelters
- 2 Sand Volleyball Courts
- Small Fishing Lake With a 0.28 Mile Paved Trail Around It
- George Gould Community Building
- Concession Stand
- Paved Hiike/Bike Trail
- Restrooms seasonal & open year round



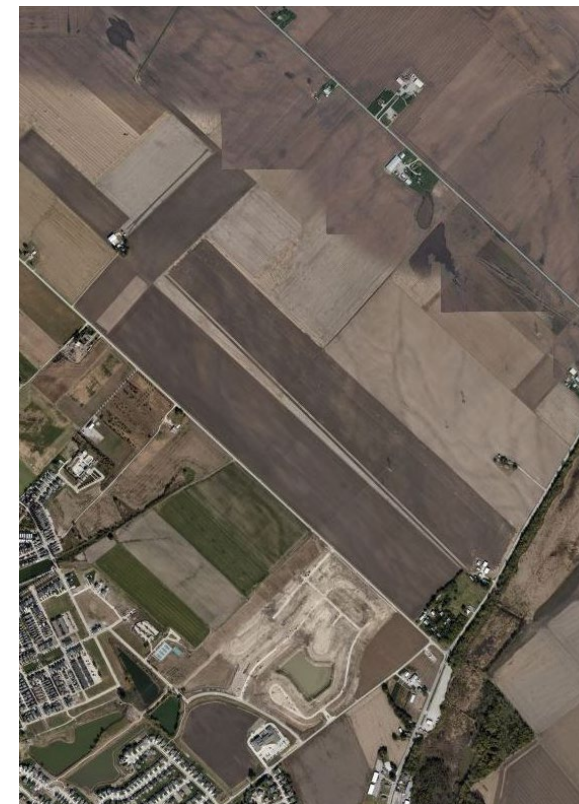
FOUNTAIN LAKES PARK 145 Acres

- Skate Park
- 3 Fishing Lakes
- 1 Pond
- Hiking / Biking Trails
- Restroom



SOCCER COMPLEX 60 Acres

- 16 Soccer Fields
- 2 Concession Stands
- Playground Area
- Paved Hiike/Bike Trail
- Restrooms (seasonal)

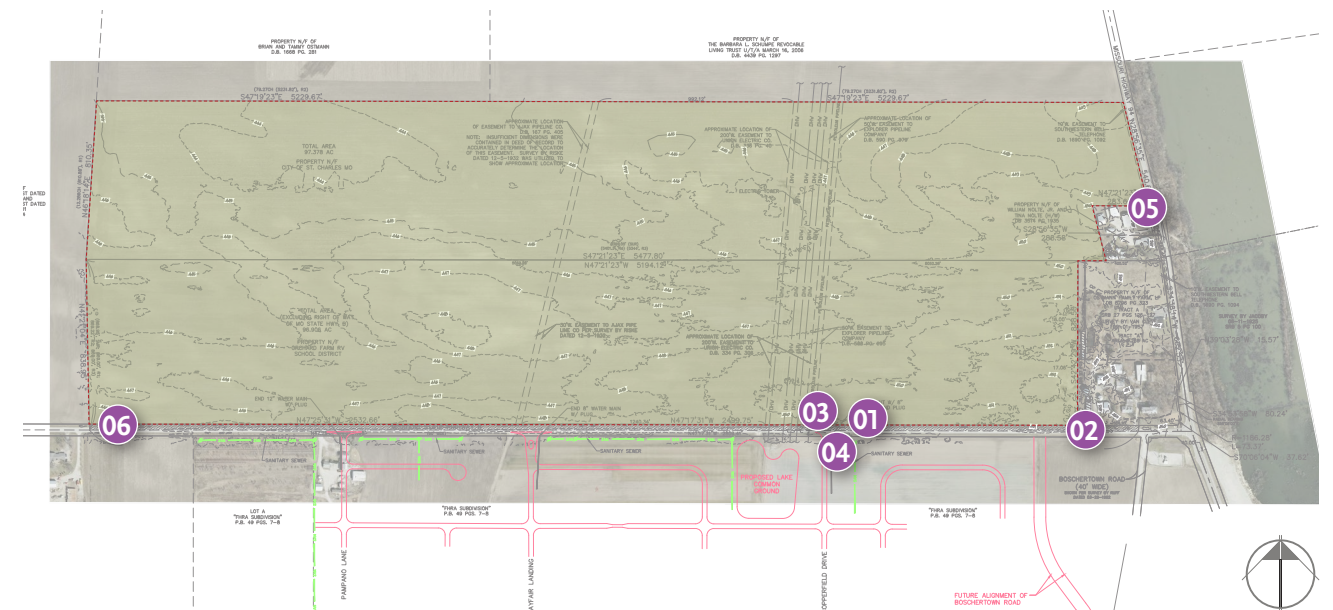


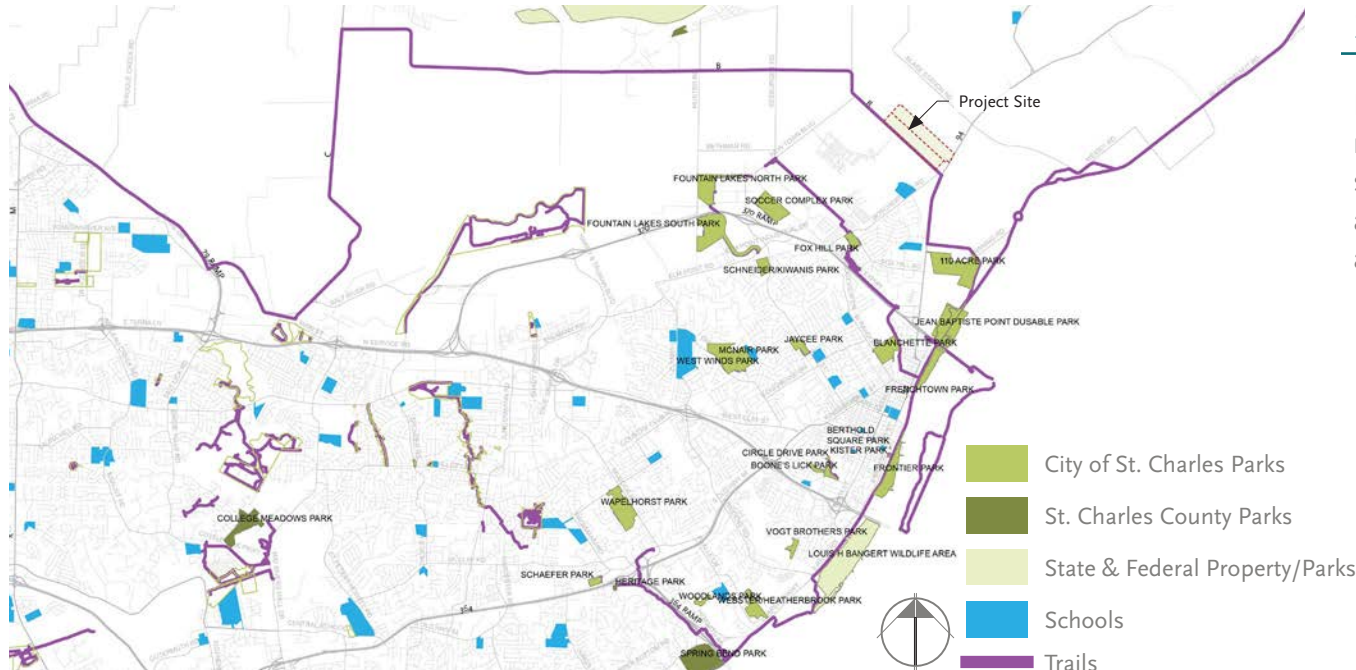
PARK SIZE COMPARISON

To better understand the scale of the new park property, similarly sized parks within the City of St. Charles provided context for identifying what program elements could fit within 100 acres. (Park images on this page are at the same scale.)

SITE CONTEXT

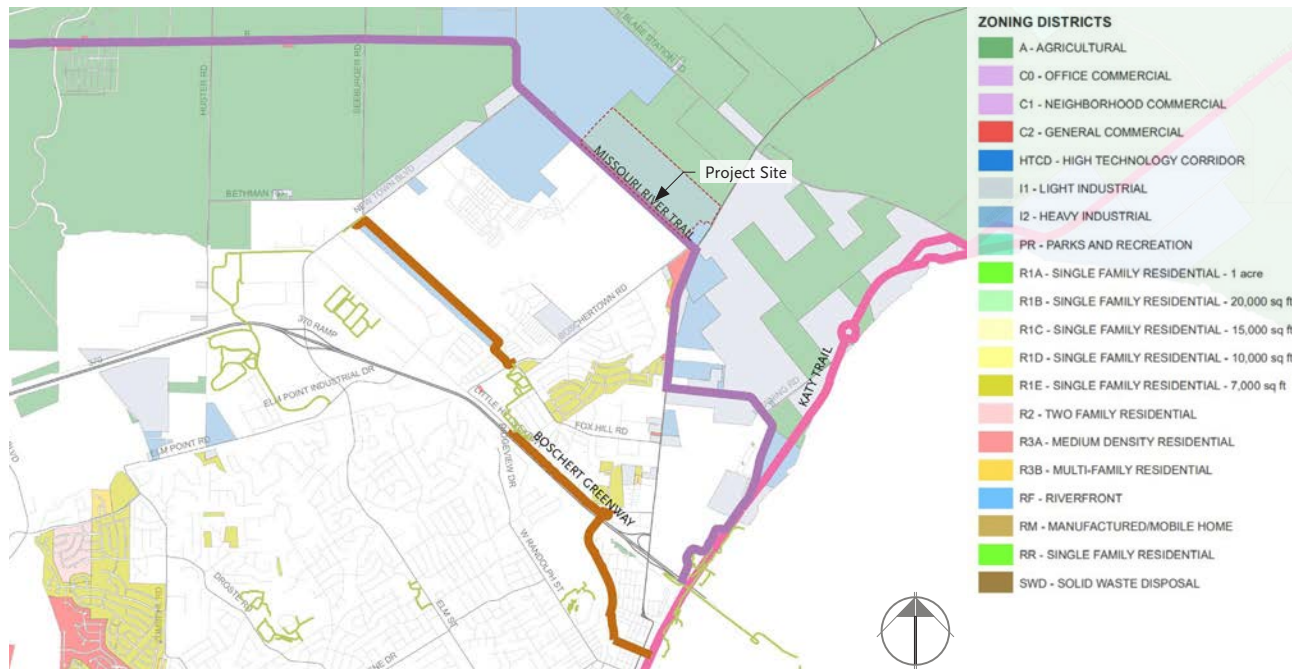
The new park and school property is active farmland with minimal topography and vegetation. The New Town and Charlestown communities are south of the property, with more farmland to the north and west. Future growth for the City of St. Charles is expected in this areas north and west of the properties.





SCHOOLS & PARKS

Located north of the City of St. Charles, the new park is in an ideal location to expand services to the community. Being located adjacent to the new school, this area can anchor the City's expansion north.



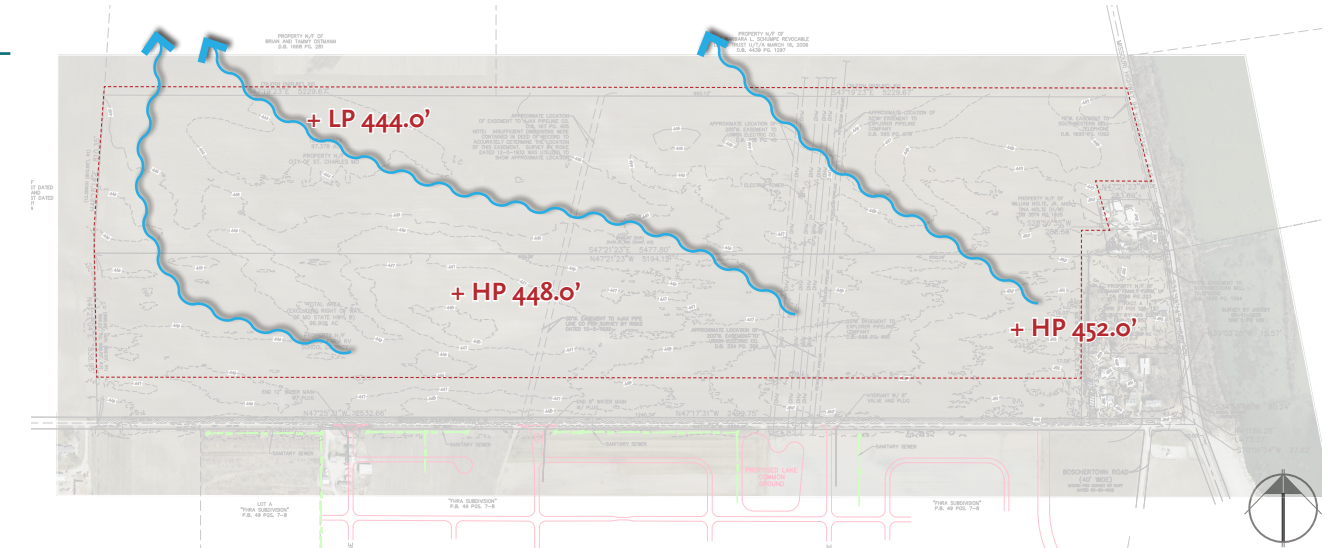
TRAILS & CONNECTIVITY

The new park site is surrounded by agricultural land anticipating development. Several regional trails are in close proximity to the project site and can enhance connectivity. The new park could become a major destination along trails in St. Charles.

- Katy Trail
- MO River Trail
- Boschert Greenway

TOPOGRAPHY & DRAINAGE

- The site has very minimal slopes for site drainage.
- There are a series of high and low points on the property.
- Preliminary stormwater management strategy considerations include a lake amenity and secondary management tools.
- Other than roadside ditches the property contains no defined drainage channels to direct stormwater to larger natural areas or storm sewer infrastructure.



UTILITIES - CONTINUED COORDINATION

Ajax Pipeline – Abandoned

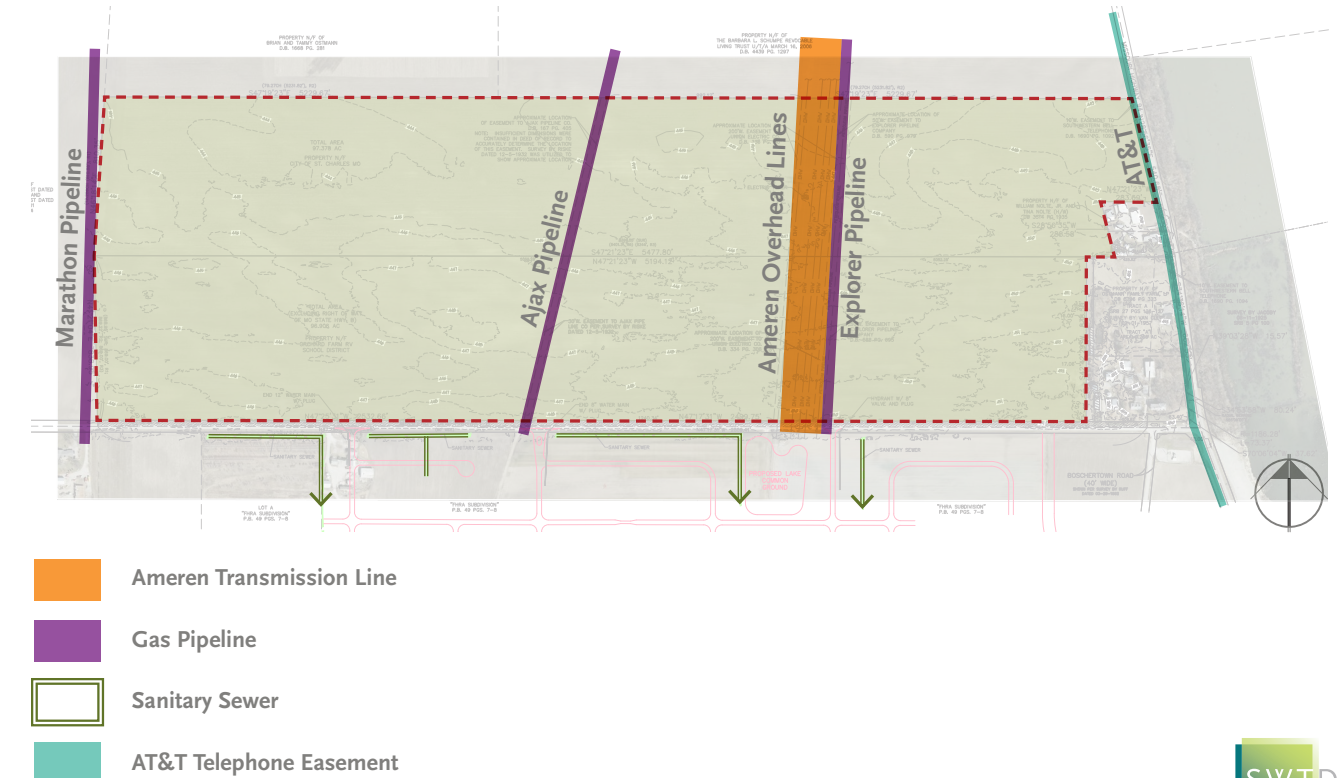
- No record of easement being vacated.
- Rights to operate 2 lines in 30' wide easement.

Explorer Pipeline

- Location shown on survey approximate
- 50' wide easement adjacent to Ameren Transmission Line Easement.
- No impoundment of water or construction of buildings within 25' of first pipeline is allowed.

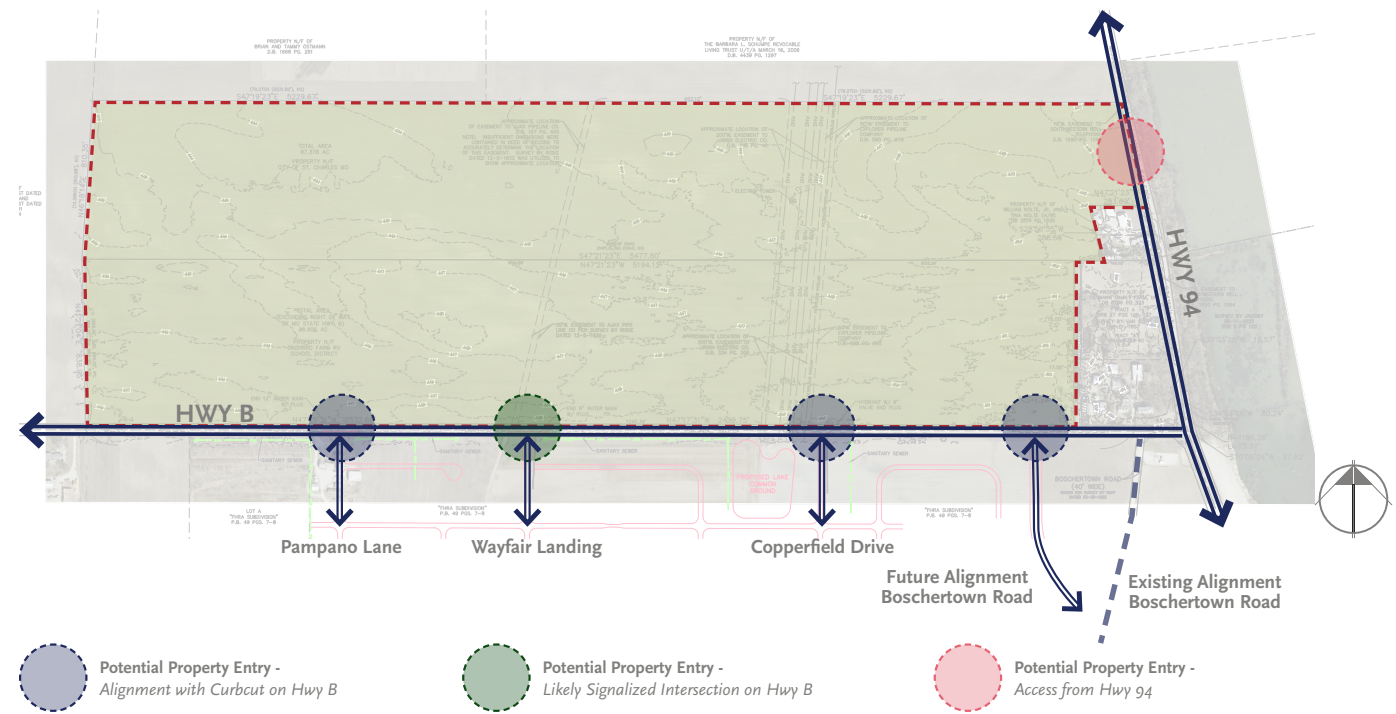
Ameren Transmission Line

- Location shown on survey approximate.
- 200' wide easement.
- No construction to interfere with operation and maintenance of transmission line is allowed.



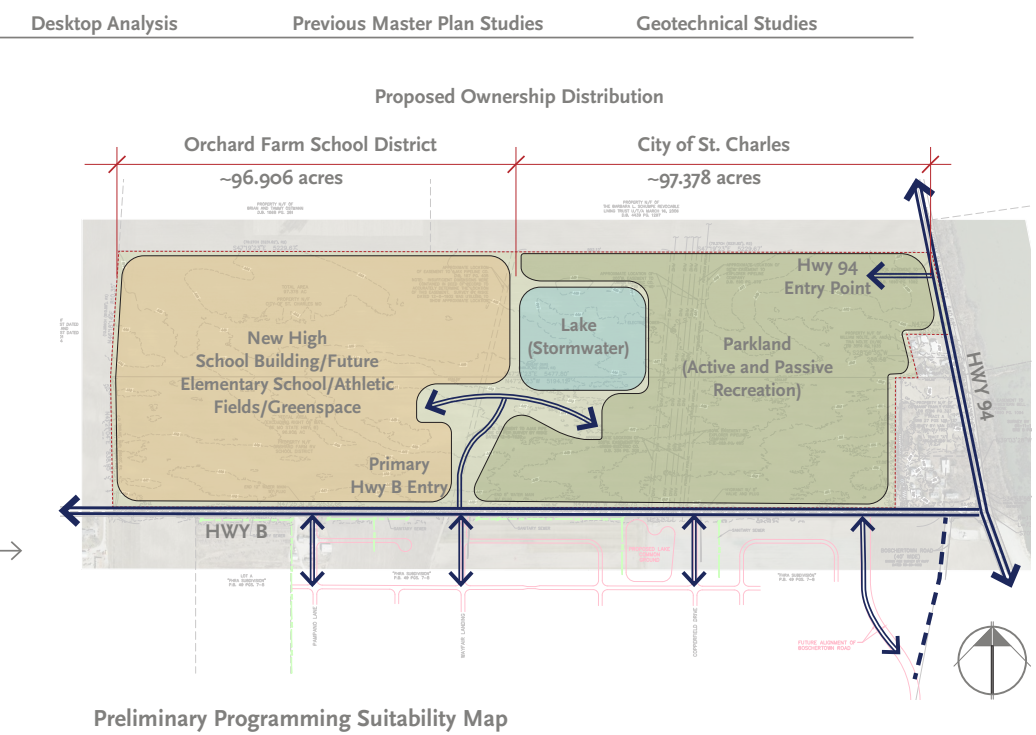
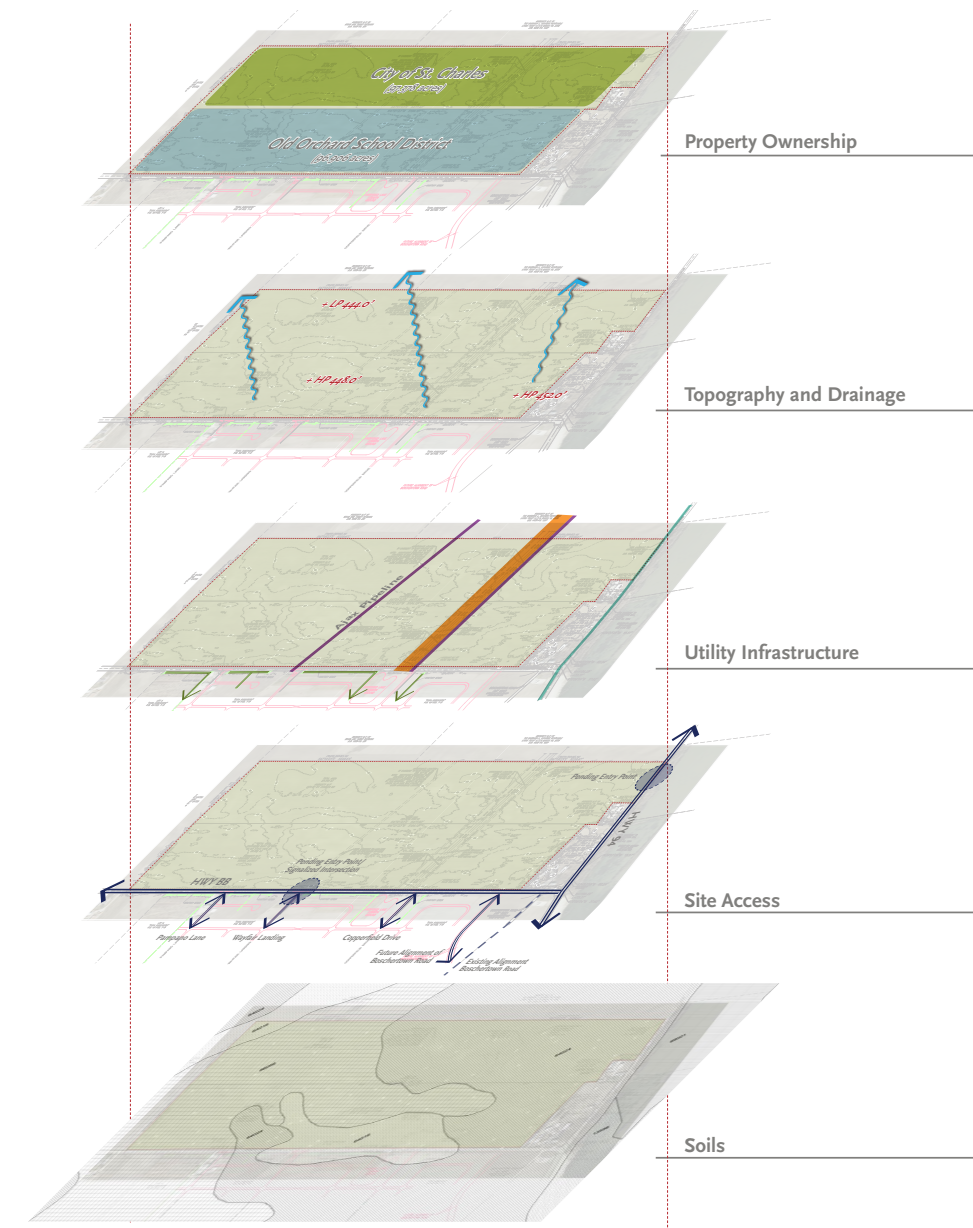
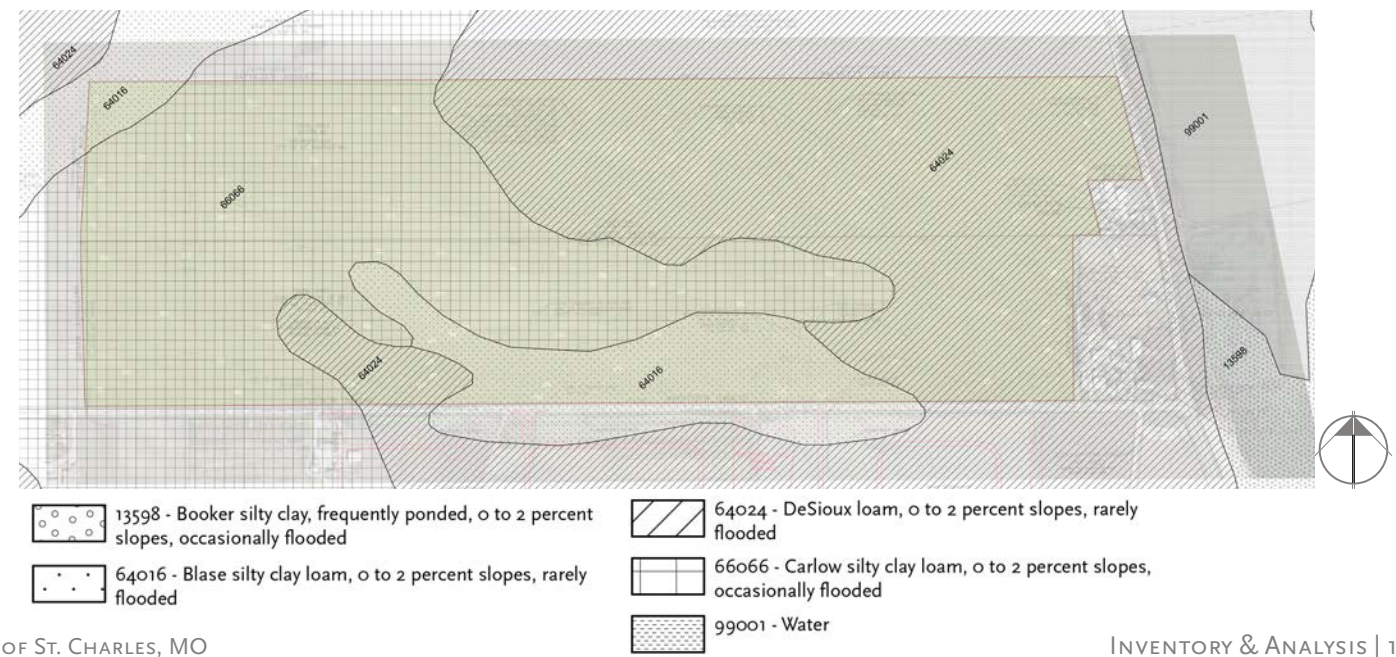
SITE ACCESS

- Hwy B and Hwy 94 are the two major thoroughfares to make vehicular circulation to
- There are future roadway improvements projected to be completed in 2021 including the realigned Boschertown Road
- Wayfair Landing is currently projected to be most suitable for adjacent entry for school/park property
- A traffic study was performed as part of PFSD site development and included anticipated park use. (see study for more details)



SOIL MAP

- Soils mapping does not necessarily represent actual soil conditions.
- Based on geologic conditions and naturally occurring soil conditions.
- Landuse as agriculture will have impact on surface soil conditions.
- Point of reference.
- Geotechnical investigation was performed for preliminary assessment of actual soil conditions. (see reports for more details)



DEVELOPMENT SUITABILITY

- The site have very minimal slopes for drainage.
- There is a series of high and low points across the property.
- Preliminary stormwater management strategy considerations include a lake and secondary management tools.
- Other than roadside ditches the property contains no defined drainage channels to direct stormwater to larger natural areas or storm sewer infrastructure.



PUBLIC ENGAGEMENT



Throughout the master plan process, the City and the design team offered three opportunities for community input and discussion. In addition to open house meetings, these input opportunities included an online survey, providing more community members a conduit to engage with the process and provide feedback.

Open House 01
December 17, 2020

- Provide project orientation and overview
- Collect feedback on concept preferences regarding amenities and types of recreation opportunities
- Identify what excites and concerns community members about the new park

[illegible]

~75
Open House Attendees

Total Engagement Participation

Open House 02
March 11, 2021

- Share feedback from first community engagement
- Present concepts designs for the 100 acre park property
- Evaluate concepts using the six criteria identified as important goals
- Identify preferred concepts and use feedback to develop a consolidated design

Open House 03
May 20, 2021

- Present draft master plan and gather feedback
- Ask community members to rank priorities for implementation
- Identify priorities for fieldhouse program elements

5 IMPLEMENTATION PRIORITIES

	95 DISC COURSE	96 FAMILY PLAY AREA	97 THE HUB	98 FIELDSHIDE	99 WILDLIFE EXHIBITS	100 LOOP TRAILS
95 DISC COURSE						
96 FAMILY PLAY AREA						
97 THE HUB						
98 FIELDSHIDE						
99 WILDLIFE EXHIBITS						
100 LOOP TRAILS						

LEGEND:

- PLACE DOT HERE TO INDICATE PRIORITY

ADDITIONAL COMMENTS:

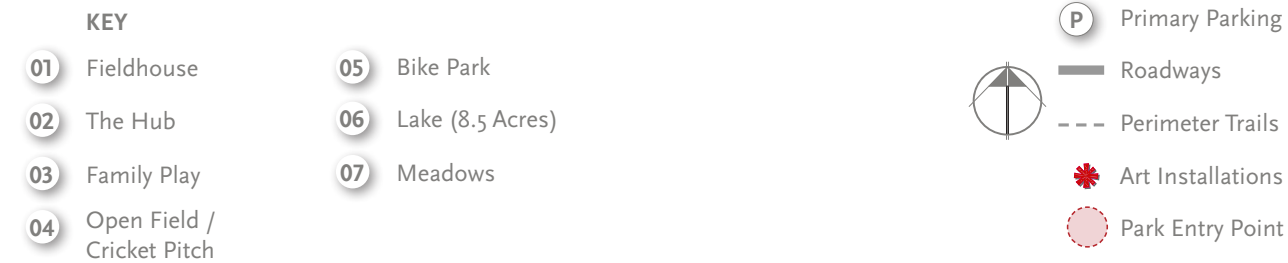
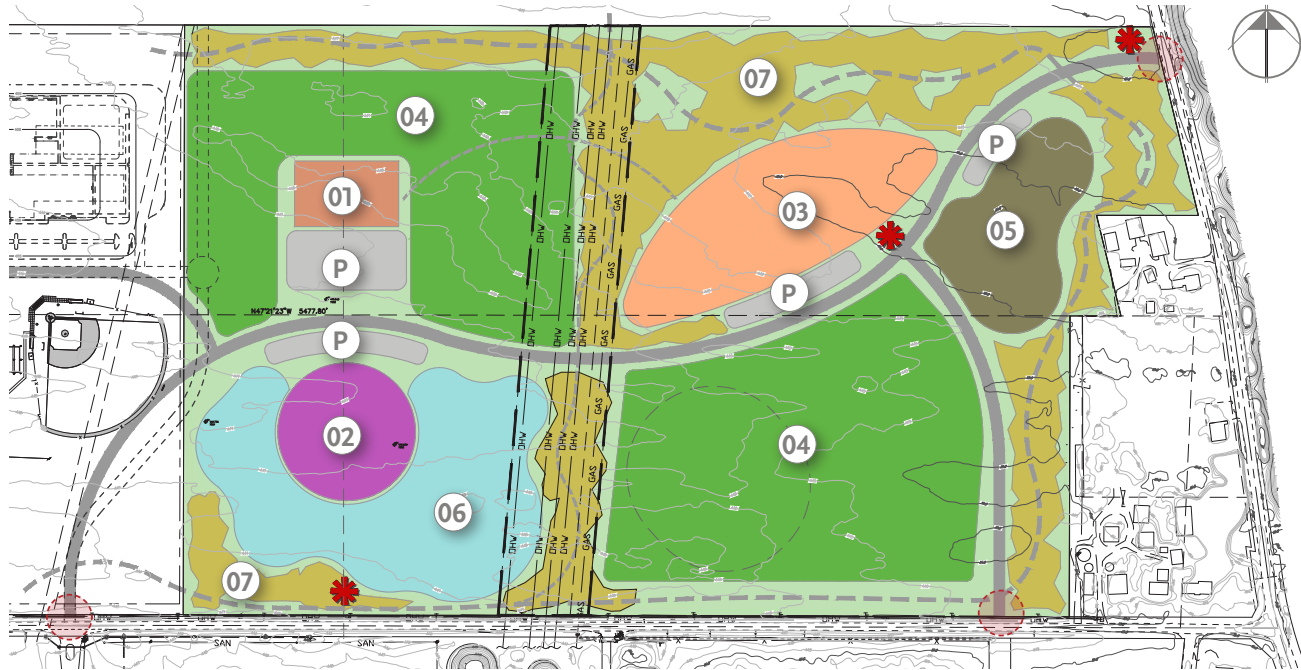
12+ young children prohibited from accessing habitat in OR Area - keep off-leash dogs out.



CONCEPT PLANS

After identifying the program priorities with Staff and the community, four concepts were developed to explore opportunities for the new 100 acre park. Each concept offered different ways to organize amenities throughout the park, circulate vehicular and pedestrian traffic, manage stormwater on-site, and connect to the adjacent school property and neighborhoods. All of the designs included core elements such as The Hub - a proposed center for activity and revenue generation, a new fieldhouse, active recreation including a bike park and open field space that could support a cricket pitch or other sports, and passive recreation opportunities. Trails would weave throughout the park to connect program areas and engage with nature. Other elements such as disc golf and family play areas would meet additional desires identified by the community.

The concept design evaluation matrix developed by the design team asked community members to consider different design elements and score how well the concepts were meeting that criteria. They were then asked to rank the concepts in order of their preference and provide additional thoughts. This feedback would then be consolidated to a final master plan.



- ACTIVE RECREATION**
- Cricket Pitch
 - Disc Golf
 - BMX / Pump Track
 - Baseball /Softball Fields
 - Cross Country Course

- PASSIVE RECREATION**
- Trails
 - Water Based Recreation
 - Flexible Lawn Areas
 - Public Art

- FACILITIES**
- Pavilions
 - Restrooms
 - Fieldhouse
 - Concessions / Food Trucks
 - Outdoor Classroom

- NATURE / ECOLOGICAL**
- Berms / Landform
 - Lake and Lake Edge
 - Stormwater Management
 - Native Landscapes

BALANCE

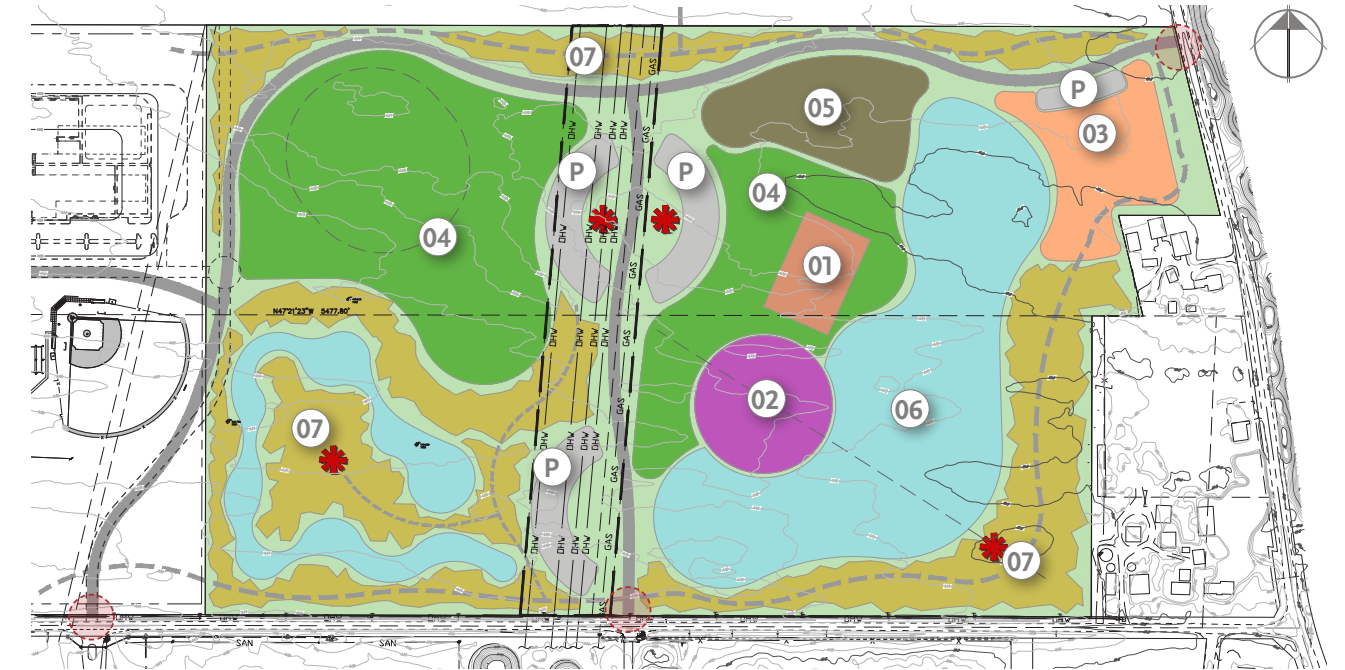
Concept Overview

- Zoned park amenities
- Central park drive
- Lake amenity sized for earthwork and minimum recreation amenity
- Hub and field house located on west side of park for connection to OFSD
- Native habitat in easement corridor and perimeter
- Three points of entry

SHARED ACTIVITY

Concept Overview

- Active core to the park
- Group the hub, field house, BMX, and flexible lawn areas around center parking lot
- Lake amenity is major recreation and visual element within the park
- Perimeter road with mid-site connection to center parking
- Family area at east end of park - access from 94
- Native habitat perimeter
- Three points of entry

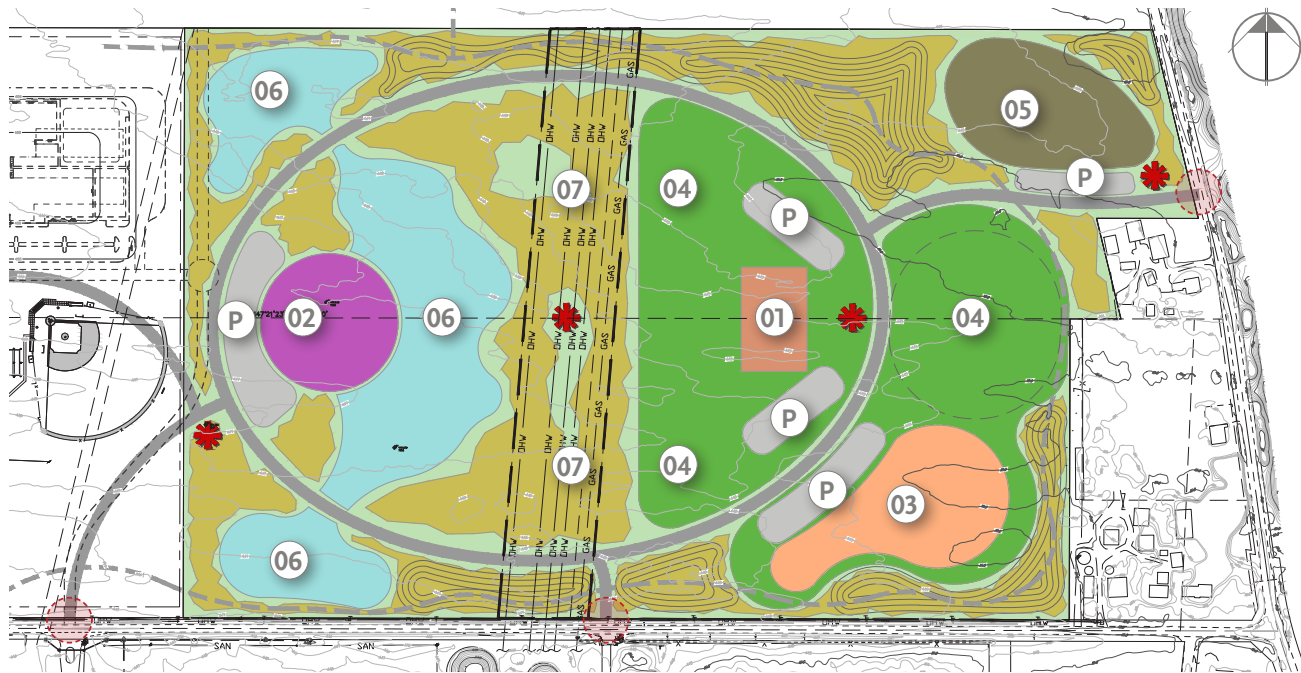


- ACTIVE RECREATION**
- Cricket Pitch
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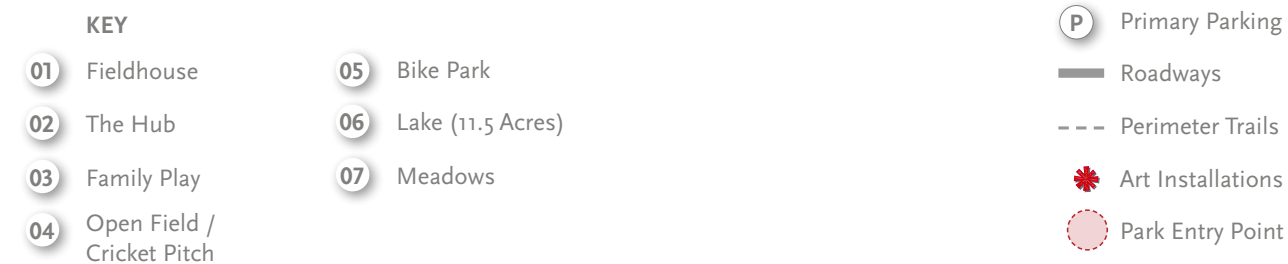
- NATURE / ECOLOGICAL**
- Berms / Landform
 - Lake and Lake Edge
 - Stormwater Management
 - Native Landscapes



THE LOOP

Concept Overview

- Central loop drive
- Hub and field house within loop as anchor at each end
- Lake on west end from north to south crossing under drive
- Earthwork / berming is major design element in concept
- Native habitat at west end of park and perimeter
- BMX as zone at east end
- Family play with flexible lawn
- Three points of entry



ACTIVE RECREATION

- **Cricket Pitch**
- Disc Golf
- BMX / Pump Track
- Baseball / Softball Fields
- Cross Country Course

PASSIVE RECREATION

- Trails
- Water Based Recreation
- **Flexible Lawn Areas**
- Public Art

FACILITIES

- Pavilions
- Restrooms
- **Fieldhouse**
- **Concessions / Food Trucks**
- Outdoor Classroom

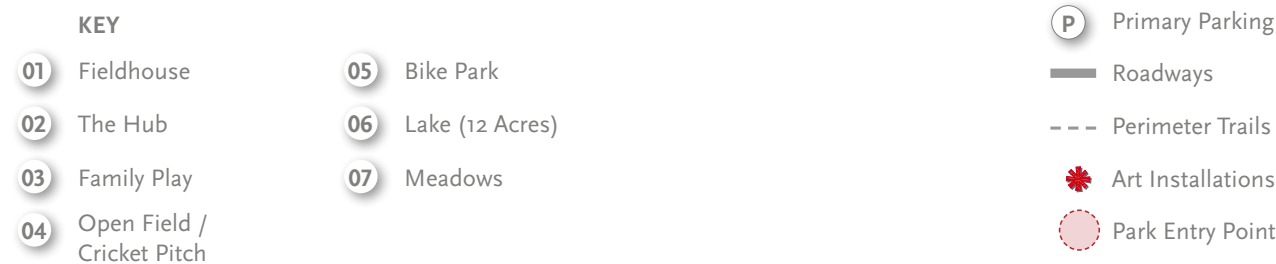
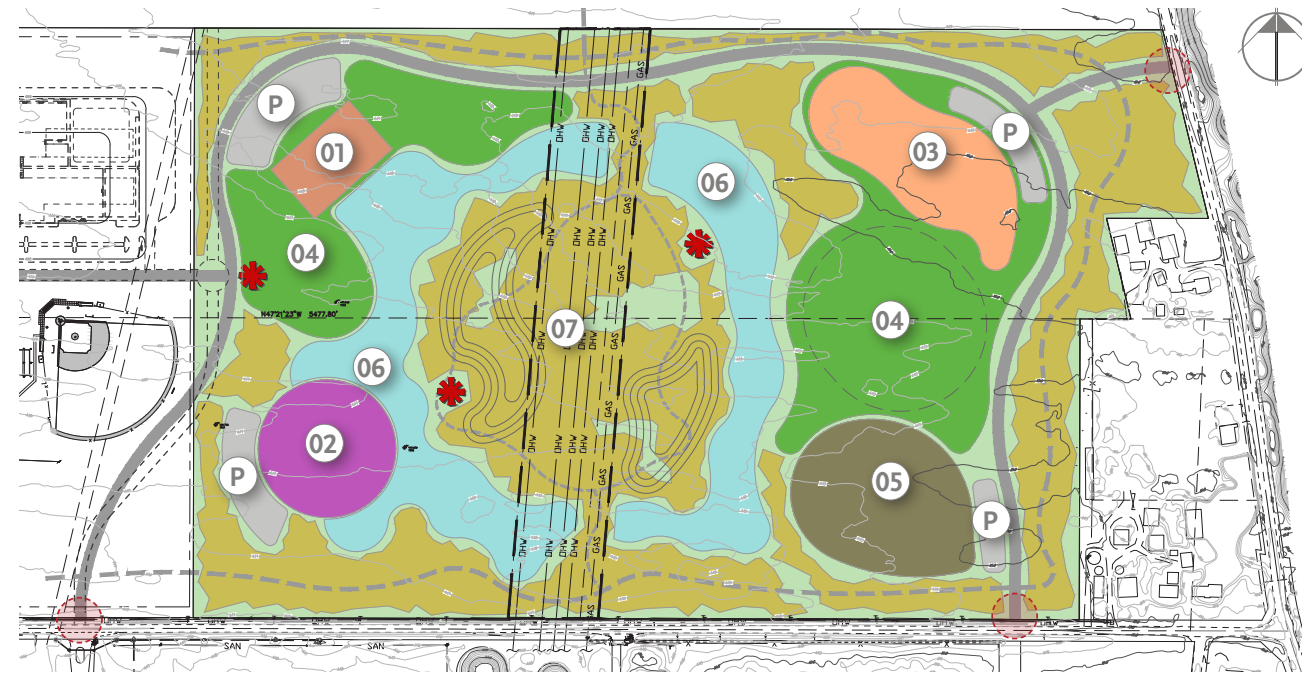
NATURE / ECOLOGICAL

- **Berms / Landform**
- Lake and Lake Edge
- Stormwater Management
- Native Landscapes

CENTRAL MEADOW

Concept Overview

- Nature focused concept
- Large central meadow with potential for art / education
- Ring water amenity with focus to west and touch to all amenity areas
- Perimeter road with amenity nodes within drive
- Hub and field house on opposite corners
- Earthwork / berming potential design element in concept
- Three points of entry



ACTIVE RECREATION

- **Cricket Pitch**
- Disc Golf
- BMX / Pump Track
- Baseball / Softball Fields
- Cross Country Course

PASSIVE RECREATION

- Trails
- **Water Based Recreation**
- **Flexible Lawn Areas**
- **Public Art**

FACILITIES

- Pavilions
- Restrooms
- **Fieldhouse**
- **Concessions / Food Trucks**
- **Outdoor Classroom**

NATURE / ECOLOGICAL

- Berms / Landform
- **Lake and Lake Edge**
- **Stormwater Management**
- **Native Landscapes**



EVALUATION MATRIX

The evaluation matrix was developed to identify how well each concept was meeting criteria identified as important by the community. Additionally, respondents were asked to rank the designs in order of their preference.

Identity and Branding

- Would this concept enrich lives and preserve green space?
- Will the park compliment the existing parks system?
- Will it be a destination within the parks system?
- Is the design appropriate in the context of the surrounding community now / future?

Community Need

- Does the design address the needs and desires identified in the Public Input?
- Does the design address Parks & Recreation Department needs and desires?

Unique Amenities / Experiences

- Does the design include amenities and park experiences unique within the Parks & Recreation system?

Park for the Entire Community

- Does the design provide recreation opportunities for all demographics?
- Does the design address opportunities for teens, an often under served population?

Stormwater Management / Ecosystem Services

- Does the design address stormwater in a functional and recreational manner?
- Does the design establish diverse ecologies to support environmental and human health and wellbeing?

Shared Amenities (Orchard Farm School District or others)

- Does the design include opportunities for shared spaces and amenities/programming?

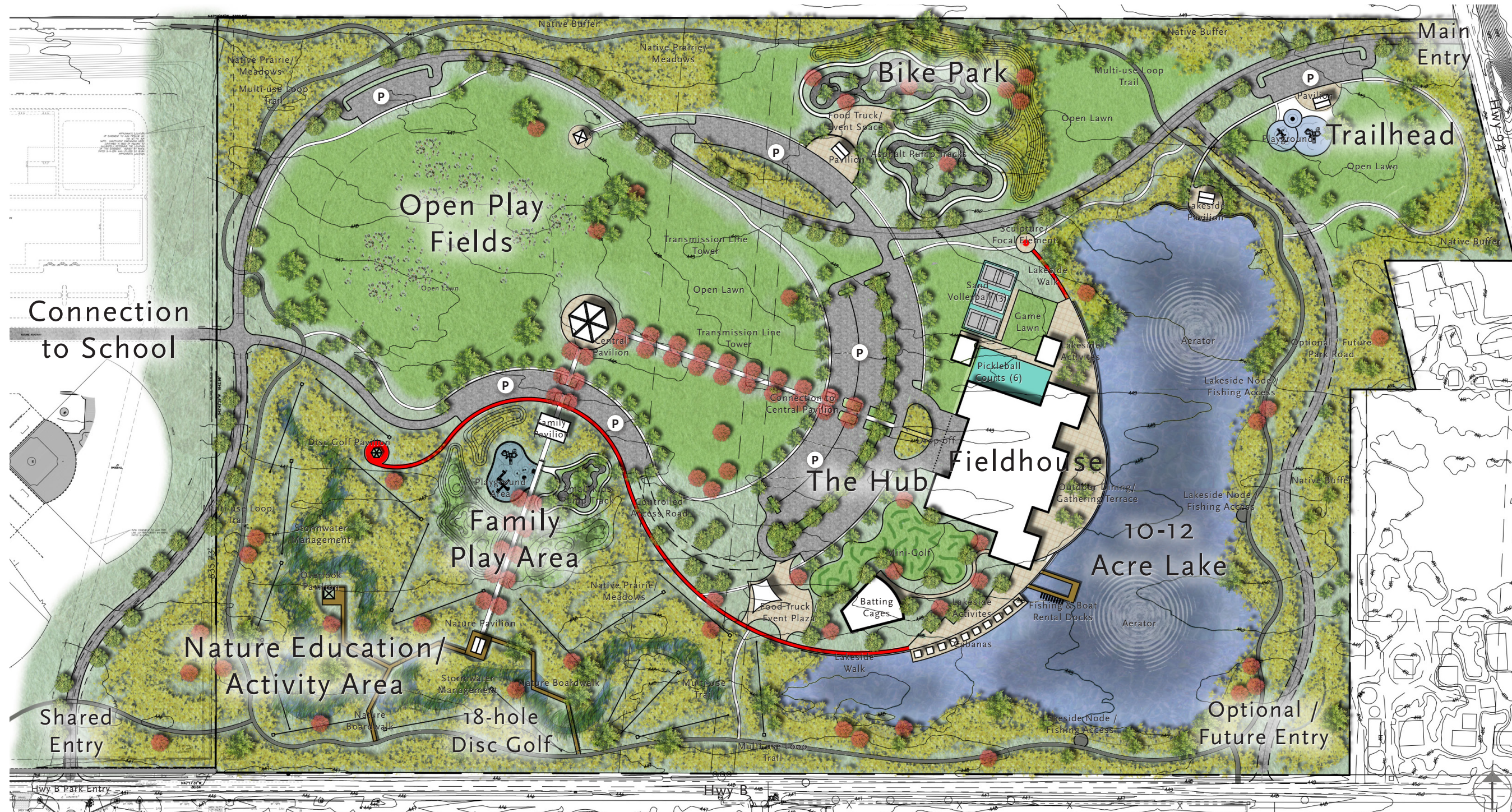
* Based on the survey scoring for concept preference the Balance and Central Meadow concepts had nearly identical scores and therefor are both noted as number two in the preference order.

SCORING KEY: ■ = Low; ■ = Medium; ■ = High

	200 Acre Park / School - New Park Concepts Evaluation			
	Park Master Plan Concepts			
Evaluation Criteria	Balance	Shared Activity	The Loop	Central Meadow
Identity and Branding	■	■	■	■
Community Need	■	■	■	■
Unique Amenities / Experiences	■	■	■	■
Park for the Entire Community	■	■	■	■
Stormwater Management / Ecosystem Services	■	■	■	■
Shared Amenities (Orchard Farm School District or others) ?	■	■	■	■
Preference Order*	2	1	4	2

FINAL MASTER PLAN

After evaluating the strengths and weaknesses of the concept designs, a final master plan was developed using feedback from the City, community and various stakeholders. Community feedback indicated a preference for well balanced design that provided unique opportunities for the City of St. Charles.



FINAL MASTER PLAN

After evaluating feedback on the concepts presented, a preliminary master plan was developed and refined to reflect the desires of the community.

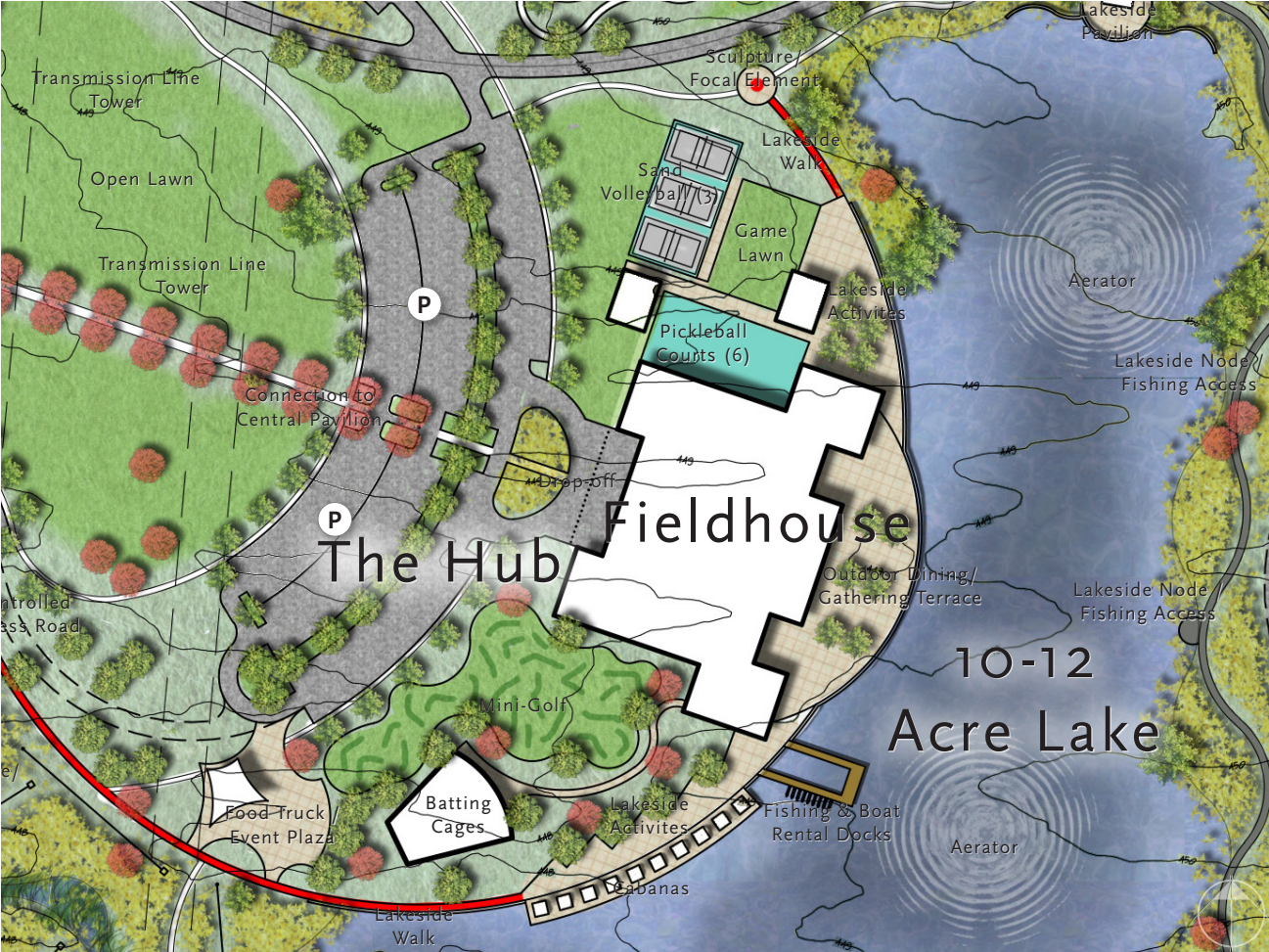
The master plan consists of these core elements:

1. Entrances, Roadways, and Parking Lots
2. Lake, Stormwater Management, and Earthwork
3. Site Utilities and Infrastructure
4. The Hub
5. Bike Park
6. Open Play Area and Cricket Pitch
7. Family/Nature Play Area
8. Trailhead Area
9. Loop Trail and Site Landscape
10. Fieldhouse Building

The following pages contain inspiration images that convey the character of the park and visitor experiences discussed throughout the planning process. Each page also includes quotes from community input received in the online feedback forms.

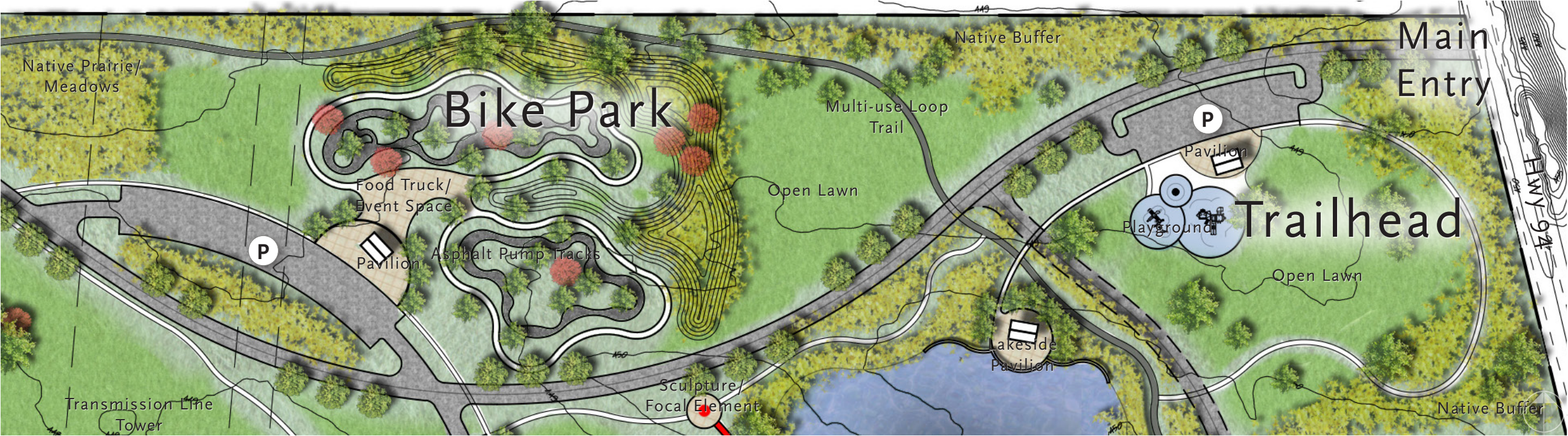
Following these image pages is a narrative snapshot and order of magnitude cost opinion organized by the core elements identified above.





“Brings life and progress to the area, enjoy the green life and attraction for local businesses.”

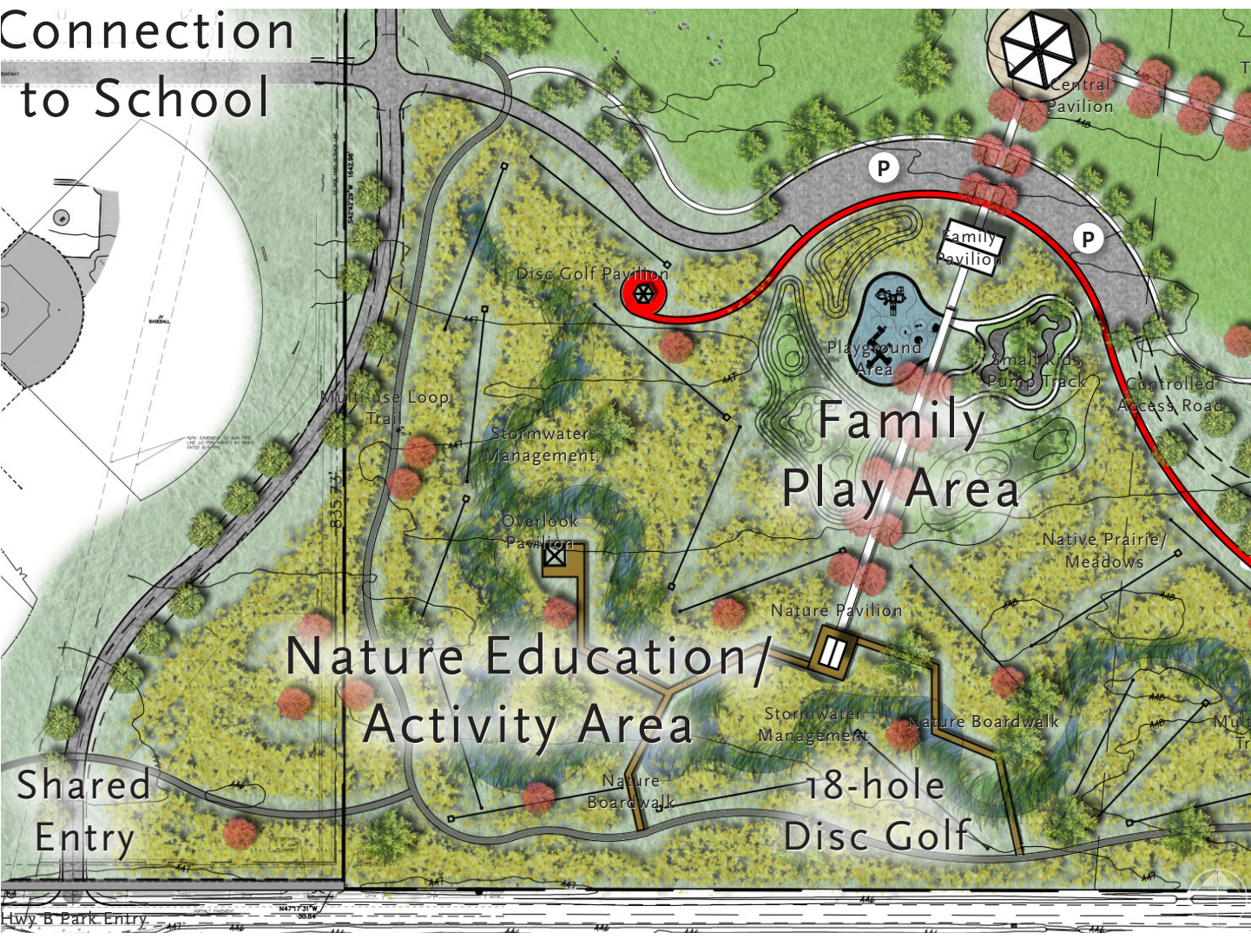




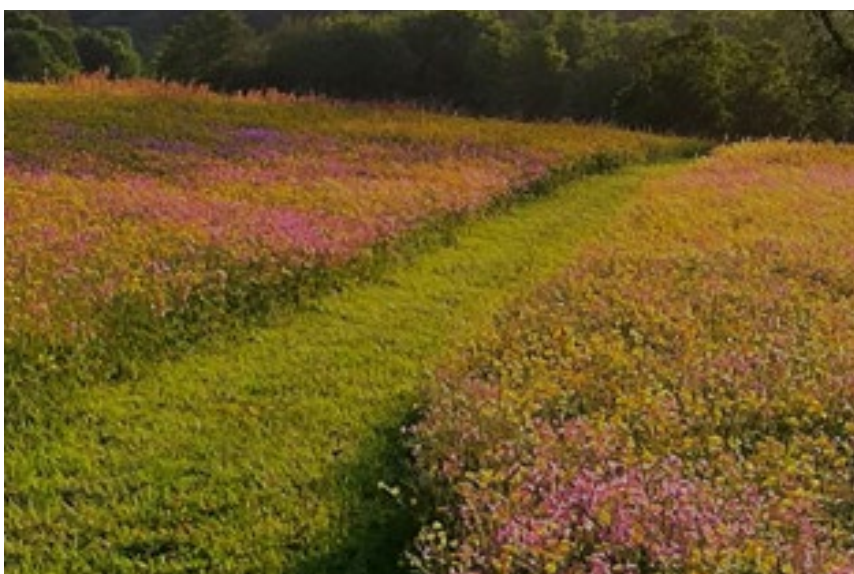
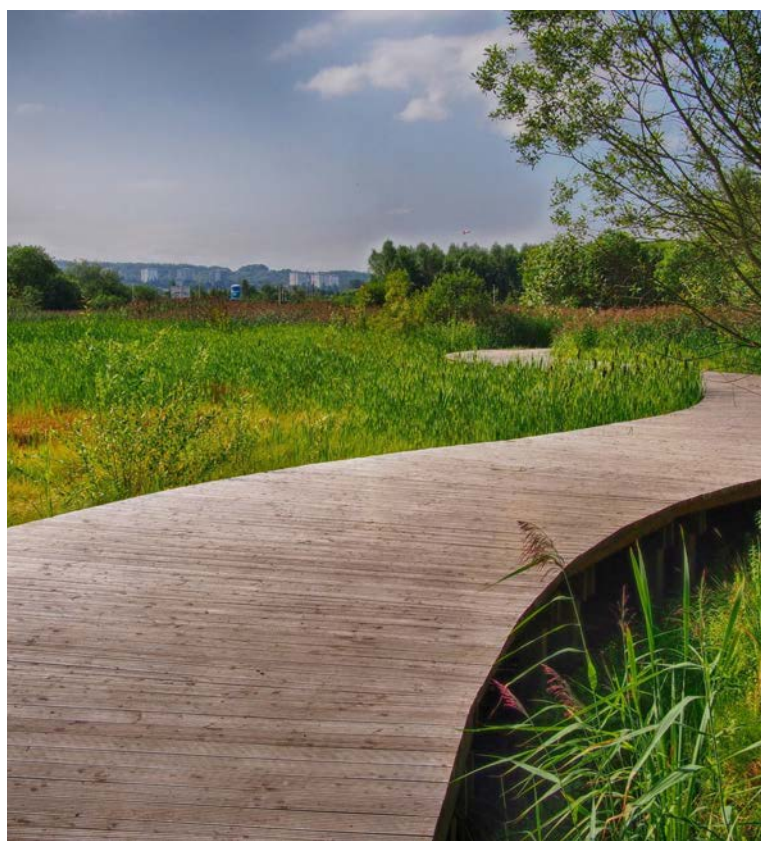
“I like the amount of trails, the different zones, as well as what I am hopefully seeing is a plan for more wooded areas in the nature zone area. I also really like the size of the lake, and glad to see some unique features like the bike park.”



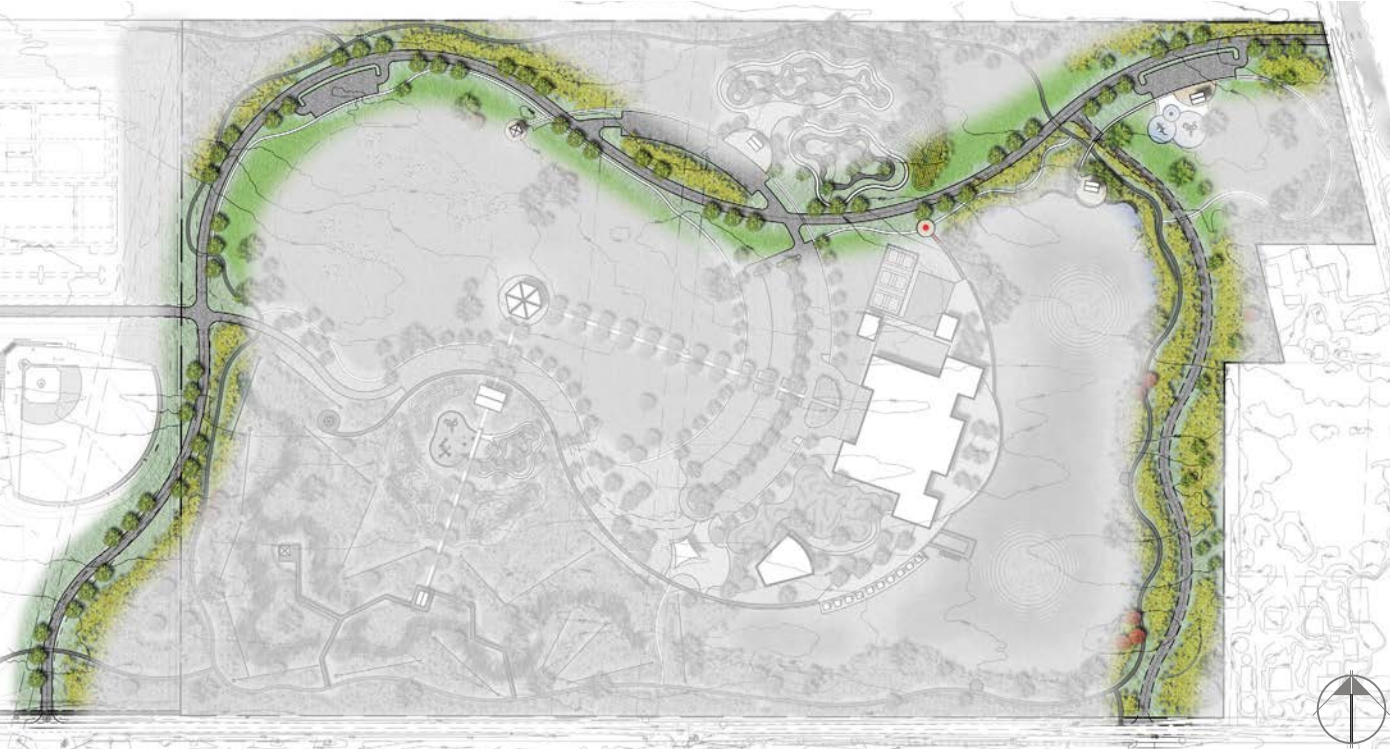
Connection to School



“It seems to have something for everyone. Many options for activities and ways to enjoy the park.”



“The large walking path around the park. Also the “boardwalk” through the stormwater area is cool.”



1 Entrances and Park Roadway				
Item	Quantity	Unit	Unit Cost	Subtotal
Park Entry (includes: Signage, Lighting, Gates, etc.)	2	ea	\$15,000.00	\$30,000.00
Main Park Roadway (Hwy B to Hwy 94)	4,300	lf	\$140.00	\$602,000.00
Street Trees	60	ea	\$600.00	\$36,000.00
Main Roadway Lighting (80 ft o.c.)	106	ea	\$10,000.00	\$1,060,000.00
Traffic Wayfinding	1	al	\$25,000.00	\$25,000.00
Accent Landscape @ Entries	2	al	\$5,000.00	\$10,000.00
Future Road Expansion (includes lighting, signage, gate, etc.)	1	ls	\$380,000.00	\$380,000.00
			Subtotal	\$2,143,000.00
			10% Contractor's General Conditions	\$214,300.00
			7% Mobilization	\$150,010.00
			15% Construction Contingency	\$321,450.00
			10% Design/Engineering Fees	\$246,445.00
			Total:	\$3,075,205.00

ENTRANCES AND PARK ROADWAYS

Circulation is primarily kept to the perimeter of the property with parking lots placed near key amenities. The main entrance from Highway B would be a shared entry with signage and connectivity the new high school campus and park.

An entry along Highway 94 would provide a secondary point of access and egress for the park and link additional circulation, as well as direct access to a trailhead with parking, small playground, and shelter.

A third, optional, entrance could be constructed in the future as a second entry from Highway B. This entrance would align with the new Boschertown Road currently under construction, and provide an additional connection to the neighborhoods south of the park.

LAKE, STORMWATER MANAGEMENT, AND EARTHWORK

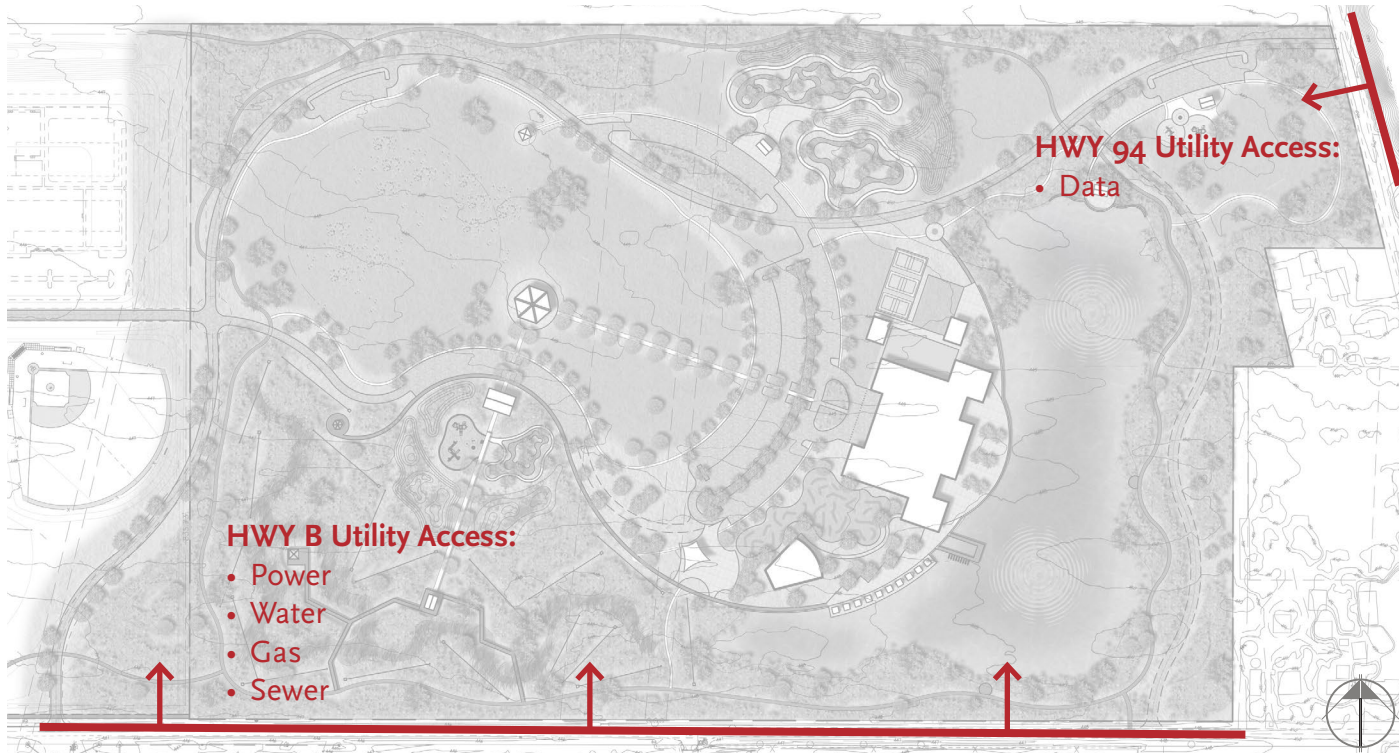
A defining feature of the new park is the 12 acre lake on the east end of the park. The lake serves to manage stormwater while providing recreational amenities such as an overlook pavilion, paddle boats, and fishing.

Supplementary retention swales and small basins are located around the family/nature play area and other strategic locations throughout the park further support the park's stormwater management efforts providing capacity for lake overflow and location specific detention and retention.

The material generated from the lake and overflow storage excavation can provide fill for site earthwork efforts including raising the fieldhouse pad and creating berms.



2 Lake, Stormwater Management, and Earthwork				
Item	Quantity	Unit	Unit Cost	Subtotal
12 Acre Lake with PVC Liner	706,000	sf	\$2.00	\$1,412,000.00
Accent Boulders on Shoreline	750	ton	\$175.00	\$131,250.00
Fountains/Aerators	2	ea	\$25,000.00	\$50,000.00
Lakeside Fishing Nodes	3	ea	\$25,000.00	\$75,000.00
Lake Overlook Pavilion	1	al	\$200,000.00	\$200,000.00
Site Earthwork	200,000	cy	\$4.00	\$800,000.00
Supplementary Retention Basins	1	al	\$150,000.00	\$150,000.00
			Subtotal	\$2,818,250.00
			10% Contractor's General Conditions	\$281,825.00
			7% Mobilization	\$197,277.50
			15% Construction Contingency	\$422,737.50
			10% Design/Engineering Fees	\$57,273.75
			Total:	\$3,777,363.75



3 Site Utilities and Misc. Infrastructure

Item	Quantity	Unit	Unit Cost	Subtotal
Electrical Service	1	al	\$250,000.00	\$250,000.00
Water Service	1	al	\$700,000.00	\$700,000.00
Sanitary Sewers	1	al	\$700,000.00	\$700,000.00
Stromwater Infrastructure	1	al	\$375,000.00	\$375,000.00
			Subtotal	\$2,025,000.00
			10% Contractor's General Conditions	\$202,500.00
			7% Mobilization	\$141,750.00
			15% Construction Contingency	\$303,750.00
			10% Design/Engineering Fees	\$232,875.00
			Total:	\$2,905,875.00

SITE UTILITIES AND INFRASTRUCTURE

Located near the intersection of Highway B and Highway 94, the new park site will be able to access necessary utilities. Access to power, water, sewer, and gas is anticipated from the south, along Highway B. Data is currently the only utility or infrastructure service located along Highway 94.

THE HUB

The Hub functions as the heart of the park and would provide a wide variety of activities, including revenue generating opportunities for the City including:

- Fieldhouse: courts, turf, track, concessions, support, etc.
- Food Truck / Event Plaza
- Batting Cages
- Mini-golf
- Pickleball and Sand Volleyball Courts
- Lakeside Cabanas
- Fishing Docks
- Boat Rentals
- Outdoor Dining / Event Terrace



4 The Hub

Item	Quantity	Unit	Unit Cost	Subtotal
Support Buildings (open-air style)	2	ea	\$75,000.00	\$150,000.00
Cabanas (open-air structures with lounge seating)	10	ea	\$20,000.00	\$200,000.00
Cabana Deck	7,500	sf	\$150.00	\$1,125,000.00
Miniture Golf (18 holes)	1	al	\$750,000.00	\$750,000.00
Illuminated Sand Volleyball (3 courts)	1	al	\$90,000.00	\$90,000.00
Batting Cages (assume 6 bays)	1	al	\$150,000.00	\$150,000.00
Outdoor Dining Terrace / Special Paving	25,000	sf	\$16.00	\$400,000.00
Lakeshore Retaining Wall	1	al	\$250,000.00	\$250,000.00
Concrete Sidewalks	15,000	sf	\$10.00	\$150,000.00
Landscape	1	al	\$190,000.00	\$190,000.00
Landscape Lighting	1	al	\$100,000.00	\$100,000.00
Lighted Pickleball Courts (6 painted asphalt courts)	1	al	\$425,000.00	\$425,000.00
Drive and Parking Lot	13,775	sy	\$30.00	\$413,250.00
Parking Lot Lighting (50' O.C.)	50	ea	\$7,500.00	\$375,000.00
Dropoff	1	al	\$50,000.00	\$50,000.00
Food Truck Plaza	15,000	sf	\$10.00	\$150,000.00
Food Truck Plaza Shade Structure	1	al	\$50,000.00	\$50,000.00
Docks for Water Boats	2,050	sf	\$150.00	\$307,500.00
			Subtotal	\$5,325,750.00

10% Contractor's General Conditions	\$532,575.00
7% Mobilization	\$372,802.50
15% Construction Contingency	\$798,862.50
10% Design/Engineering Fees	\$110,636.25

Total:	\$7,140,626.25
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BIKE PARK

The proposed bike park area will provide unique amenities for the City of St. Charles. Asphalt pump tracks are ideal recreational opportunities for new and experienced riders alike. Each user can engage with the tracks depending on their individual skill level and confidence.

A restroom/storage building and multiuse plaza space support the bike park for say use along with creating a location for registration, vendors, and food trucks at special events and competition.

Walking trails around bike park and connecting to the loop trail provide activity for non-bike users.

5 Bike Park				
Item	Quantity	Unit	Unit Cost	Subtotal
Grading and Creation of Bike Park (two tracks)	63,000	sf	\$25.00	\$1,575,000.00
Pavilion w/ Restroom	1	al	\$350,000.00	\$350,000.00
Landscape	1	al	\$85,000.00	\$85,000.00
Drive and Parking Lot	2,750	sy	\$30.00	\$82,500.00
Parking Lot Lighting (50' O.C.)	15	ea	\$7,500.00	\$112,500.00
Specialty Paving	7,000	sf	\$12.00	\$84,000.00
Concrete Sidewalks	5,000	sf	\$10.00	\$50,000.00
			Subtotal	\$2,339,000.00
			10% Contractor's General Conditions	\$233,900.00
			7% Mobilization	\$163,730.00
			15% Construction Contingency	\$350,850.00
			10% Design/Engineering Fees	\$40,085.00
			Total:	\$3,127,565.00

OPEN PLAY AREA AND CRICKET PITCH

With the abundance of athletic field complexes within the park system and the surrounding are this park will focus on flexibility and special use with its larger open green space to provide the most value in the park.

Located near the center of the park, adjacent to the fieldhouse and family areas is a large flexible green space and cricket pitch. This green space provides opportunity for informal play, flying a kite, team practices, etc. The cricket pitch is included to address a need expressed in the planning process and a growing request of the parks and recreation department. This will be a unique amenity within the parks system and increase park usage.

This open play area includes a central pavilion for day use and events. Parking is provided in several locations including shared parking with the fieldhouse and family play area.



6 Open Play Area and Central Pavilion				
Item	Quantity	Unit	Unit Cost	Subtotal
Earthwork and Fine Grading (assume topsoil)	1	al	\$100,000.00	\$100,000.00
Stadium Lighting	1	al	\$600,000.00	\$600,000.00
Central Pavilion with Electric and Lighting (no restroom)	1	al	\$350,000.00	\$350,000.00
Landscape	1	al	\$50,000.00	\$50,000.00
Drive and Parking Lot	1,355	sy	\$30.00	\$40,650.00
Parking Lot Lighting (50' O.C.)	8	ea	\$7,500.00	\$60,000.00
Specialty Pavement	11,500	sf	\$16.00	\$184,000.00
Concrete Sidewalks	30,500	sf	\$10.00	\$305,000.00
Open-air Pavilion / Single Table Trail Shelters	1	al	\$125,000.00	\$125,000.00
			Subtotal	\$1,814,650.00
			10% Contractor's General Conditions	\$181,465.00
			7% Mobilization	\$127,025.50
			15% Construction Contingency	\$272,197.50
			10% Design/Engineering Fees	\$39,719.75
			Total:	\$2,435,057.75



7 Family / Nature Play Area				
Item	Quantity	Unit	Unit Cost	Subtotal
Signature Playground and Supporting Elements	1	al	\$750,000.00	\$750,000.00
Family Pavilion with Restroom	1	al	\$350,000.00	\$350,000.00
Small Pump Track (prefabricated)	1	al	\$50,000.00	\$50,000.00
Drive and Parking Lot	3,255	sy	\$30.00	\$97,650.00
Parking Lot Lighting (50' O.C.)	14	ea	\$7,500.00	\$105,000.00
Concrete Walkways	12,500	sf	\$10.00	\$125,000.00
Specialty Pavement	10,000	sf	\$16.00	\$160,000.00
Landscape	1	al	\$100,000.00	\$100,000.00
Berming and Nature Play Area	1	al	\$350,000.00	\$350,000.00
Nature Boardwalks	1	al	\$350,000.00	\$350,000.00
Disk Golf (concrete tee and baskets)	1	al	\$25,000.00	\$25,000.00
Overlook Pavilions	3	ea	\$75,000.00	\$225,000.00
			Subtotal	\$2,687,650.00
			10% Contractor's General Conditions	\$268,765.00
			7% Mobilization	\$188,135.50
			15% Construction Contingency	\$403,147.50
			10% Design/Engineering Fees	\$309,079.75
			Total:	\$3,856,777.75

FAMILY/NATURE PLAY AREA

The southwest portion of the park site has been identified as a family/nature play area. Paired with stormwater management strategies, this area would combine passive and active recreation opportunities.

A signature playground and pavilion would be a key destination for families, especially those with younger children. Berms and landform will shape a nature play area and blend with the more organic elements of the stormwater management system within this section of the park.

This would be the site of an 18-hole disc golf course - a widely desired amenity that would blend with the landscape and bring more users to the park.

Various boardwalks, pavilions, outdoor classrooms, and native planting areas will provide quiet and passive spaces for park users, complementing the other program elements proposed for the park.

TRAILHEAD AREA

Located at the Highway 94 entry, a dedicated trailhead area would be developed to welcome park visitors. This location is ideal for people that may want to utilize the park trail system, without necessarily engaging with the more active park amenities. The smaller playground and pavilion proposed here would anchor the trailhead, and people could explore the park biking or walking.



8 Trailhead Area				
Item	Quantity	Unit	Unit Cost	Subtotal
Playground	1	al	\$200,000.00	\$200,000.00
Pavilion with Restroom	1	al	\$250,000.00	\$250,000.00
Landscape	1	al	\$85,000.00	\$85,000.00
Drive and Parking Lot	1,600	sy	\$30.00	\$48,000.00
Parking Lot Lighting (50' O.C.)	8	ea	\$7,500.00	\$60,000.00
Concrete Walkways	6,000	sf	\$10.00	\$60,000.00
Special Pavement	4,000	sf	\$16.00	\$64,000.00
			Subtotal	\$767,000.00
			10% Contractor's General Conditions	\$76,700.00
			7% Mobilization	\$53,690.00
			15% Construction Contingency	\$115,050.00
			10% Design/Engineering Fees	\$88,205.00
			Total:	\$1,100,645.00



9 Landscape Buffers and Misc. Items

Item	Quantity	Unit	Unit Cost	Subtotal
Misc. Site Landscape	1	al	\$50,000.00	\$50,000.00
Multi-Use Trail (12 ft. wide asphalt)	11,500	sy	\$28.00	\$322,000.00
Meadows/Prairies	1	al	\$250,000.00	\$250,000.00
Landscape Irrigation (entrances, hub, fieldhouse, landscape areas)	1	al	\$150,000.00	\$150,000.00
			Subtotal	\$772,000.00
			10% Contractor's General Conditions	\$77,200.00
			7% Mobilization	\$54,040.00
			15% Construction Contingency	\$115,800.00
			10% Design/Engineering Fees	\$88,780.00
			Total:	\$1,107,820.00

LOOP TRAIL AND SITE LANDSCAPE

The landscape and perimeter trail system will enhance the passive recreation opportunities of the park.

A multi-use trail system will follow the edge of the property and make connections to destinations within the park. The perimeter trail provides a 1.5 mile loop around the park.

Meadow and prairie planting can reduce maintenance, provide buffers and wildlife habitat, and enhance overall park aesthetics.

FIELDHOUSE BUILDING

The fieldhouse, located at the heart of the park, will be a key destination for the City of St. Charles. With a wide range of sizes and amenities, the master plan identifies three potential fieldhouse buildings to be explored.

- 50,000 sf Fieldhouse (courts and turf)
- 95,000 sf Fieldhouse w/ 200 meter track
- 125,000 sf Fieldhouse w/ 300 meter track, and premium amenities



FH Fieldhouse Building				
Item	Quantity	Unit	Unit Cost	Subtotal
Fieldhouse Building	50,000	sf	\$135.00	\$6,750,000.00
			Subtotal	\$6,750,000.00

10% Contractor's General Conditions	\$675,000.00
7% Mobilization	\$472,500.00
10% Construction Contingency	\$675,000.00
10% Design/Engineering Fees	\$742,500.00
Grand Total:	\$9,315,000.00

FH Fieldhouse Building				
Item	Quantity	Unit	Unit Cost	Subtotal
Fieldhouse Building (200m Track, Courts)	95,000	sf	\$160.00	\$15,200,000.00
			Subtotal	\$15,200,000.00

10% Contractor's General Conditions	\$1,520,000.00
7% Mobilization	\$1,064,000.00
10% Construction Contingency	\$1,520,000.00
10% Design/Engineering Fees	\$1,672,000.00
Grand Total:	\$20,976,000.00

FH Fieldhouse Building				
Item	Quantity	Unit	Unit Cost	Subtotal
Fieldhouse Building (300m Track, Courts, Premium Amenities)	125,000	sf	\$200.00	\$25,000,000.00
			Subtotal	\$25,000,000.00

10% Contractor's General Conditions	\$2,500,000.00
7% Mobilization	\$1,750,000.00
10% Construction Contingency	\$2,500,000.00
10% Design/Engineering Fees	\$2,750,000.00
Grand Total:	\$34,500,000.00

PHASING & IMPLEMENTATION

OVERALL COST OPINION

1	Entrances and Park Roadway		\$3,075,205.00
2	Lake, Stormwater Management, and Earthwork		\$3,777,363.75
3	Site Utilities and Misc. Infrastructure		\$2,905,875.00
4	The Hub		\$7,140,626.25
5	Bike Park		\$3,127,565.00
6	Open Play Area and Central Pavilion		\$2,435,057.75
7	Family / Nature Play Area		\$3,856,777.75
8	Trailhead Area		\$1,100,645.00
9	Landscape Buffers and Misc. Items		\$1,107,820.00
Park Development Sub Total: \$			28,526,935.50
FH	Fieldhouse Building	50,000 sqft	\$9,315,000.00
Grand Total: \$			37,841,935.50
FH	Fieldhouse Building	95,000 sqft, 200m tr	\$20,976,000.00
Grand Total: \$			49,502,935.50
FH	Fieldhouse Building	125,000 sqft, 300m t	\$34,500,000.00
Grand Total: \$			63,026,935.50

FUNDING STRATEGIES

The successful implementation of the master plan depends on maximizing various funding strategies. These opportunities could include:

1. **City Funding** (likely the primary funding mechanism)
 - Capital Budgeting
 - Bond Initiative
 - Tax District (Hotel / Motel Tax)
 - Fiscal Recovery Funds
2. **Strategic Partners** (potential for single component or long-term use)
 - Development
 - Corporate/ Education
 - Operations/ Program
3. **Grant Funding** (compliment sources above for project specific elements)
 - Land & Water Conservation Fund (\$250,000.00 max.)
 - Project / Amenity Based Grants (playgrounds, athletic based, etc.)

NEXT STEPS

- Field House and Hub Feasibility Study & Business Plan
- Continued implementation strategy discussion with City Administration and elected officials.

