

Mermaid Lake Master Site Plan

WHITPAIN TOWNSHIP, MONTGOMERY TOWNSHIP

Board of Supervisors Meeting

July 20, 2021

Thank you for your time!

Meeting Agenda

- Introductions
- Project Scope & Project Schedule
- Public Engagement Process & Public Survey
- Site Analysis & Design Approach
- Refined Concept
- Traffic / Intersection Level of Service
- Order of Magnitude Costs
- Discussion / Comments
- Next Steps

Mermaid Lake
Master Site Plan

WHITPAIN TOWNSHIP, MONTGOMERY TOWNSHIP

Consultant Team

Simone Collins Landscape Architecture

- Peter Simone / Sarah Leeper / Joe Wallace

4ward Planning

- Todd Poole

Princeton Hydro

- Laura Craig

Spotts, Stevens, & McCoy

- Mark Stabolepszy / Lyn Rodino

Wallover Architects

- Ted Wallover / Susan Wallover

Seiler + Drury Architecture

- Doug Seiler / Eric Baugher

Environmental Standards

- Joe Kraycik / Stephen Brower

Comprehensive Land Services

Mermaid Lake Master Site Plan

WHITPAIN TOWNSHIP, MONTGOMERY TOWNSHIP

Steering Committee

Michele Minnick	Board of Supervisors
Fred Conner	Board of Supervisors
Roman Pronczak	Township Manager
Dave Mrochko	Assist. Township Manager
Jim Blanch	Engineering Director
Tom Farzetta	Public Works Director
Travis DeCaro	Project Coordinator
Kurt Baker	Parks & Rec Director
Mike Richino	Parks & Rec Director
Courtney Meehan	Program Coordinator P&R
Marshall Bleefeld	Park & OS Board/School Dist.
Angela Dougherty	Park & OS Board/AWJFA
Sandi Feltes	Park & OS Board alternate
Sean O'Donnell	Comp Plan Committee/WRA
John Ferro	Comp Plan Committee/Wiss Trails
Melissa Brown	Comp Plan Committee/Inclusion
Edgar David	Shade Tree Commission - Chair
Natalie Macy	Planning Commission
Ed Lane	Zoning Hearing Board - Chair
Harry Phifer	Zoning Hearing Board
Bob Trejo	Boy Scout Troop 98 - Resident
Joe Smallberger	Boy Scout Troop 117 - Resident
Connie Morgenson	Resident
Victoria Hyczko	Resident
Margaret Phiambolis (Sibby)	Resident

Project Schedule

Mermaid Lake Master Site Plan

WHITMIRE TOWNSHIP, MONTGOMERY TOWNSHIP

Board of Supervisors Meeting - July 20, 2021 -
Simone Collins Landscape Architecture

Meeting	Purpose	Date	Time
Phase 1			
Committee Meeting 1	Kickoff Meeting / Brain Storming	Thursday, December 10, 2020	5:30pm-7:00pm
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Project Scope

* PHASE COMPLETED *

PHASE 1 (NOV-FEB)

[INVENTORY & ANALYSIS] The primary tasks of this phase will include an inventory of existing conditions, market study, programming and initial conceptualization of potential future uses.

* CURRENT PHASE *

PHASE 2 (FEB-AUG)

[DEVELOP CONCEPTS] Building on the insights gained in Phase 1, three possible future use concepts will be developed into one (1) focused development option.

* NEXT PHASE *

PHASE 3 (AUG-NOV)

[DEVELOP MASTER PLAN] Develop a detailed master site plan.

Meetings & Public Engagement

Public Meeting 1
January 25, 2021
150 Attendees

Brainstorming & Kickoff



GOALS	FACTS	CONCEPTS	PARTNERS	
Master Site Plan	72.3 acres (Main Site 47.5)	Market Study Inform the Program	Only open to Whitpain Residents?	WRA
Enhance Site Ecology	Jolley Rd and Arch Street Bi-sect Site	Frisbee Golf	Swimming	DCNR
Right size a Pool and Program	Nor-Gwy Pool (municipal)	Swim Programs	Walking Trail	DCED
Make Revenue Netural/Positive	Whitpain Greens Swim Club	Arch and Jolley Intersection Review	Keep Open for only Whitpain	Minimal Improvement

Public Meeting 2
April 12, 2021
250 Attendees

Reviewed Concepts A, B, C



Public Meeting 3
June 7, 2021
90 Attendees

Reviewed Refined Concept



Meetings & Public Engagement

Committee Meeting 1 – December 10, 2020

- *Kickoff & Brainstorming*

Committee Meeting 2 – January 14, 2021

- *Market Gap Presentation*

Committee Meeting 3 – February 8, 2021

- *Phase 1 Inventory & Analysis Review*

Committee Meeting 4 – March 11, 2021

- *Concept Options*

Committee Meeting 5 – May 6, 2021

- *Concepts Refinement (A,B,C)*

Committee Meeting 6 – June 9, 2021

- *Refined Concept Plan*

Site Visit With Adjacent Neighbors July 13, 2021

- *Walked site and listened to neighbor concerns and wishes for Mermaid Park*

Mermaid Lake
Master Site Plan
WHITING TOWNSHIP, MONTGOMERY TOWNSHIP

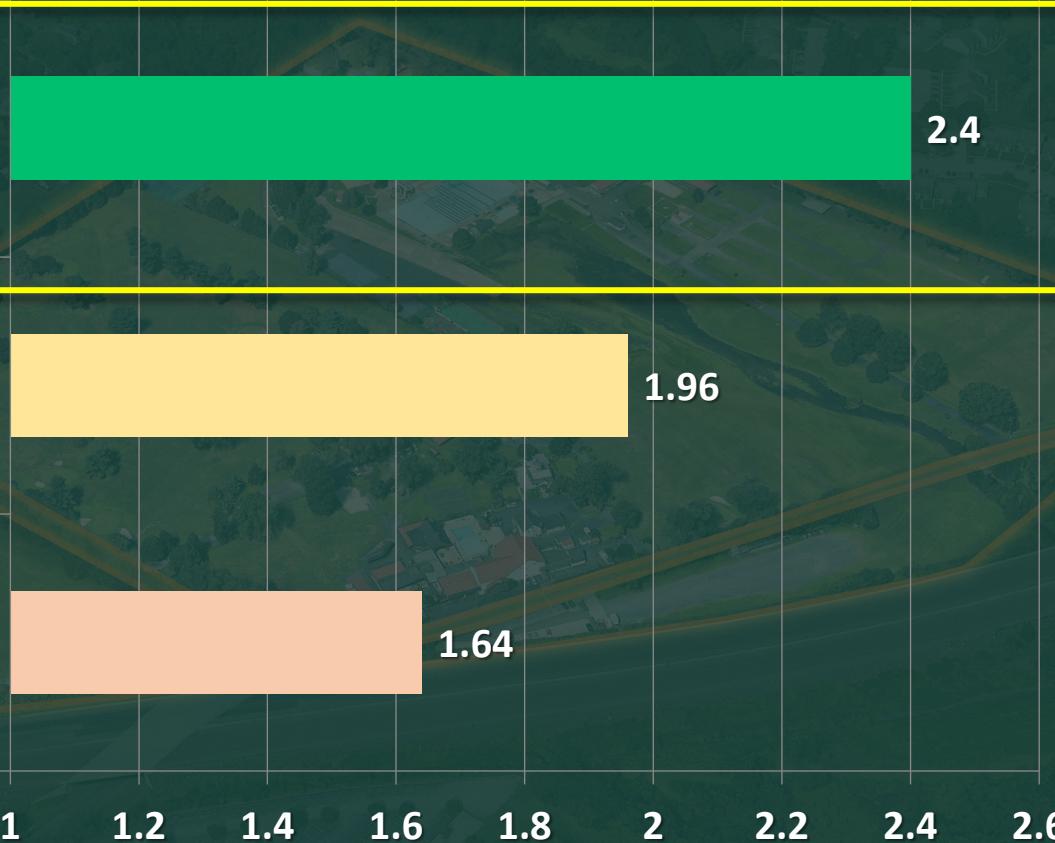


Public Opinion Survey Results

- 1256 Total Survey Responses

Please rank the three concept plans in order of your overall preference, with 1 being your preferred concept (2 & 3 for subsequent concepts)

Concept B - Passive / Active Recreation



Concept B Preferences:

Rank 1: 463 (top #1 rank)

Rank 2: 516

Rank 3: 48

Concept C Preferences:

Rank 1: 359

Rank 2: 273

Rank 3: 395

Concept A Preferences:

Rank 1: 205

Rank 2: 238

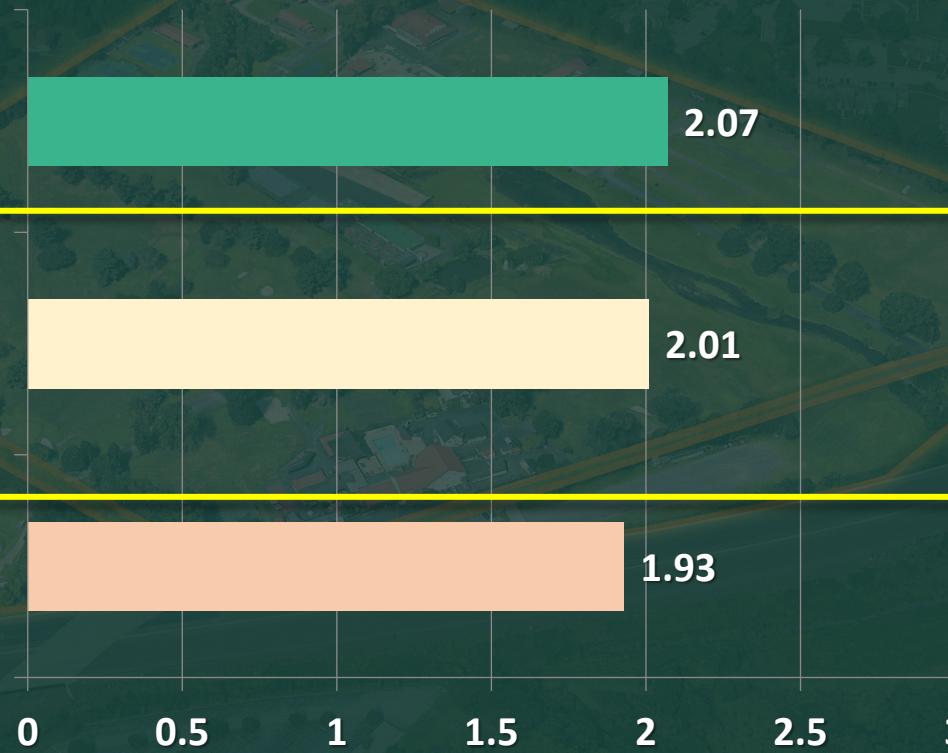
Rank 3: 584

Public Opinion Survey Results

- 1256 Total Survey Responses

Concept A,B, and C explore **different options for Mermaid stream and pond**. Please rank the three options in order of your overall preference, with 1 being your preferred option (2 & 3 for subsequent options)

Keep and repair Dam - leave pond same size



Remove Dam & Pond - enhance floodplain to mitigate downstream floods; create open water areas / wetland habitat

Preferences:
Rank 1: 348
Rank 2: 361
Rank 3: 278

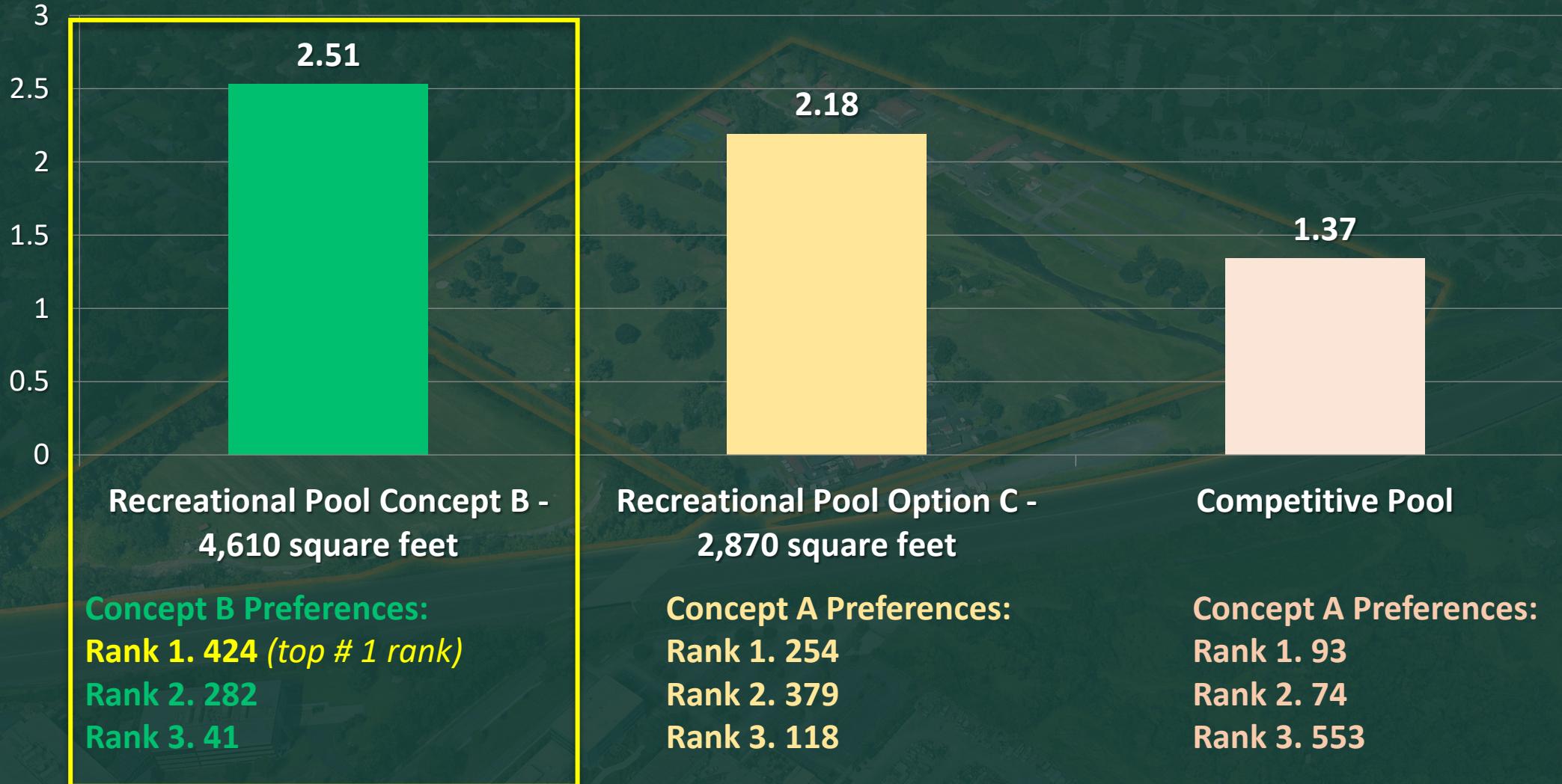
Keep and repair Dam - smaller pond

Preferences:
Rank 1: 426 (top #1 rank)
Rank 2: 155
Rank 3: 418

Public Opinion Survey Results

- 1256 Total Survey Responses

The plan explores **multiple options for water-based recreation at Mermaid Lake**. Please rank the three options in order of your overall preference. - with 1 being your preferred concept (2 & 3 for subsequent options)



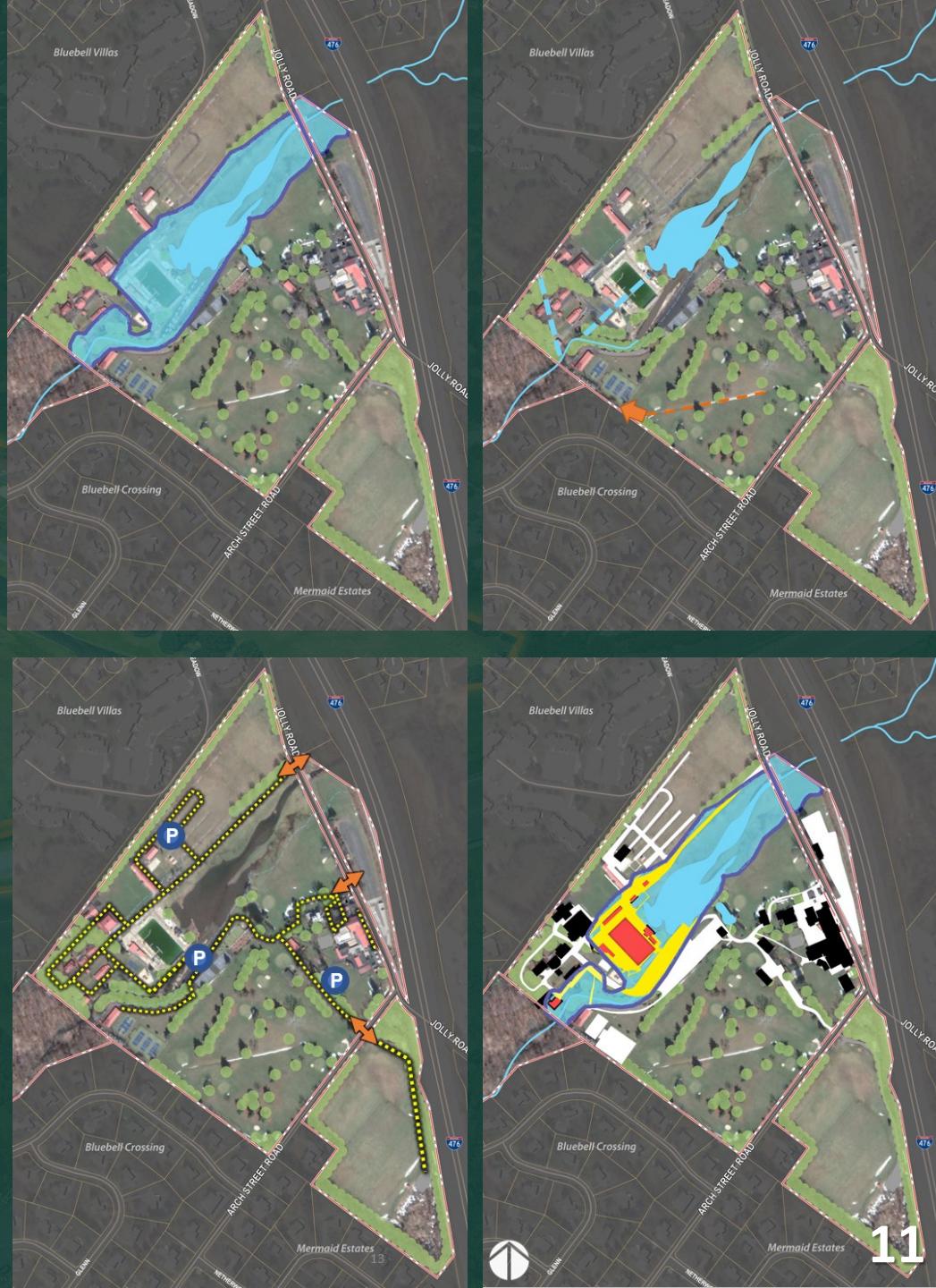
Site Analysis & Design Approach

In February, the consultant team completed a Phase 1 site inventory & analysis report which included:

- Assessment of Existing Pools
- Site Access / Roadways
- Water & Sewer Service
- Electrical Service
- Phase I Environmental Site Assessment
- Natural Features Assessment
- Dam Assessment
- Forest Management Plan

Full Phase 1 Report Available For Review Here:

<https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:19444521-a53f-49e4-b329-8328d0ed1576>



Site Analysis & Design Approach

Assessment of existing pool facilities

Pool expert Ted Wallover noted the following in the Phase 1 assessment:

“Based on the:

- excessive size,
- location within the flood plain,
- overall condition of the exiting aquatic facilities,
- inadequately sized restroom and locker facilities,
- significant safety & code deficiencies,

the renovation of this pool in its current state is not recommended or warranted.”

Rehabilitation of existing pool would cost as much if not more than construction of a new pool facility.



Site Analysis & Design Approach

Dam Removal Analysis:

Water resource experts Princeton Hydro noted in their Phase 1 analysis:

*"preliminary recommendations for ecosystem improvements at Mermaid Lake **include** removing of the dam, daylighting the buried portion of the stream, and restoring the floodplain."*

Removal of the dam, swimming pool & restoration of the stream would yield significant benefits:

- Create habitat that can support a diversity of species,
- Reconnect floodplain,
- Reduce erosion of the stream channel at the pipe outlet
- Reduce local and downstream flooding,



- Require less regular maintenance and engineering (& associated costs) such as dredging or structural repairs.
- Remove need for future Pennsylvania Department of Environmental Protection Dam Repair or Modification Permits. Dam removal permit allows most flexibility for park improvements.

Concept Refinement Process

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Refined Concept

This refined concept includes elements of previously-presented concepts A,B & C and was informed by public opinion survey results and conversations with Township staff.

Mermaid Lake Master Site Plan

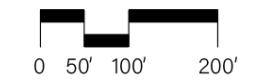
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Legend

Existing

- Project Area
- Parcel Lines
- Waterway
- Floodplain
- Building / Structure
- Road



North

Proposed

- Driveway
- Parking
- Pedestrian / Bicycle Bridge
- Primary Trail
- Secondary Trail
- Trail / Maintenance Access
- Pavilion
- Reforested Areas
- Planted Buffer
- Meadow
- Wetland Area / BMP
- Riparian Buffer
- Waterway



Parking Needs Analysis

Facility	Est. Users (Max)	Parking Needed
A. Jolly Rd. Entrance & drop off		
Camp (seasonal)	225	25
Camp Offices / Staff	40	40
Before and After Care	50	
Snack Shack Community Building	200	35
Restrooms		
Splay Play / Ice Skating	50-100	25
Pavilions		
2 pavilions	200	
PickleBall	32	20
Restrooms		

Estimated Parking Needed: 145 Spaces

Planned in Concept: 150 Spaces

B. Jolly rd & Arch St. Rd access

Barn				
Barn - Events	250	125		
Offices - day to day sales	4-8			
Barn - Food Services	40	20		
Inclusive Playground	50			
Pavilions				
2 pavilions	200			
Manor House	50	12		
Pool (seasonal)	348	110		

Estimated Parking Needed: 267 Spaces

Planned in Concept: 300 Spaces



**Parking to be built incrementally*

TOTAL Est. Parking Needed: 412 Spaces

TOTAL Planned in Concept: 450 Spaces





North

Facilities & Recreation

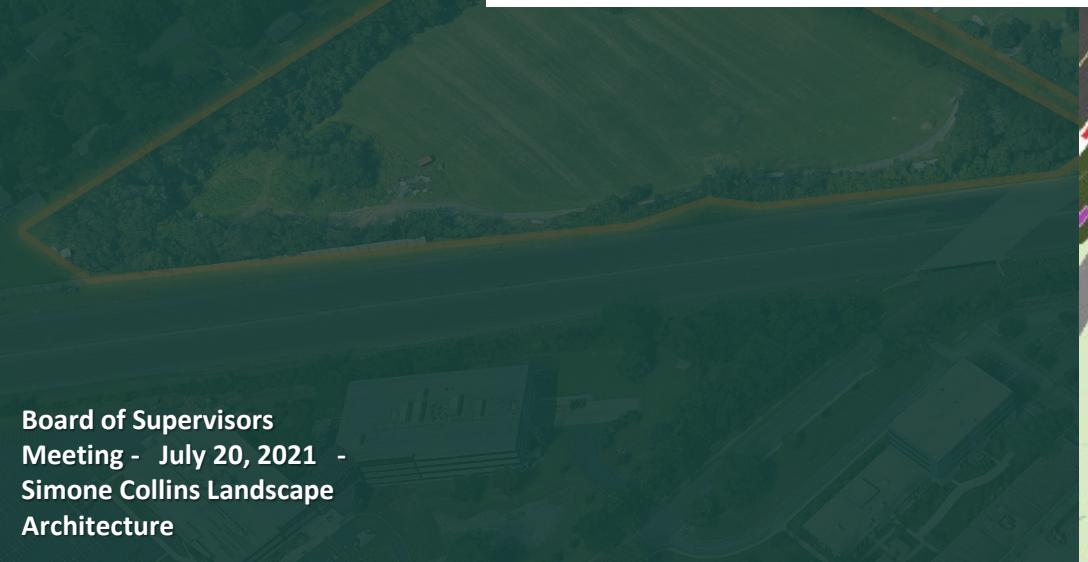
- ④ Playground
- ⑦ Pickleball courts (8) with restroom

Habitat & Natural Areas

- ② Dam / pond removed,
Floodplain enhancement / restoration,
Series of shallow step pools

Parking

- # Number of spaces per parking area
- A Vehicular dropoff and ADA parking





Facilities & Recreation

- ① Outdoor Play Court
- ② Inclusive Nature-Based Play
- ③ Inclusive Play + Spray Play
- ④ Playground
- ⑤ Open Play Fields
(Equivalent to 2 football fields)
- ⑥ Gaga Court

Buildings & Structures

- ① Large pavilion
- ② Office, restroom
- ③ 4-season community building
- ④ Wetland boardwalk + fishing access

Habitat & Natural Areas

- ① Daylight stream
- ② Dam / pond removed,
Floodplain enhancement / restoration,
Series of shallow step pools

Parking

- # Number of spaces per parking area
- A Vehicular dropoff and ADA parking





Facilities & Recreation

- 9 Manor house outdoor receptions
- 10 Tent Area
- 11 Outdoor event plaza

Buildings & Structures

- 5 Fishing pier
- 6 Pavilion
- 7 Nature Center
- 8 Reception / small events (first floor)
- 9 Offices
- 10 Event entrance
- 11 Large event space
- 12 Food / snack bar / restroom
- 13 Small pavilion

Habitat & Natural Areas

- 2 Dam / pond removed, Floodplain enhancement / restoration, Series of shallow step pools
- 3 Farm pond enlarged
- 4 Reforested buffer

Parking

- # Number of spaces per parking area
- A Vehicular dropoff and ADA parking





Facilities & Recreation

- 8a Pool Option A (6-lane pool, concession stand, bathhouse & changing areas)
- 8b Pool Option B (8-lane competition pool, additional 40 parking spaces)

Parking

- # Number of spaces per parking area
- A Vehicular dropoff and ADA parking

Concept Elements

Pool Facility

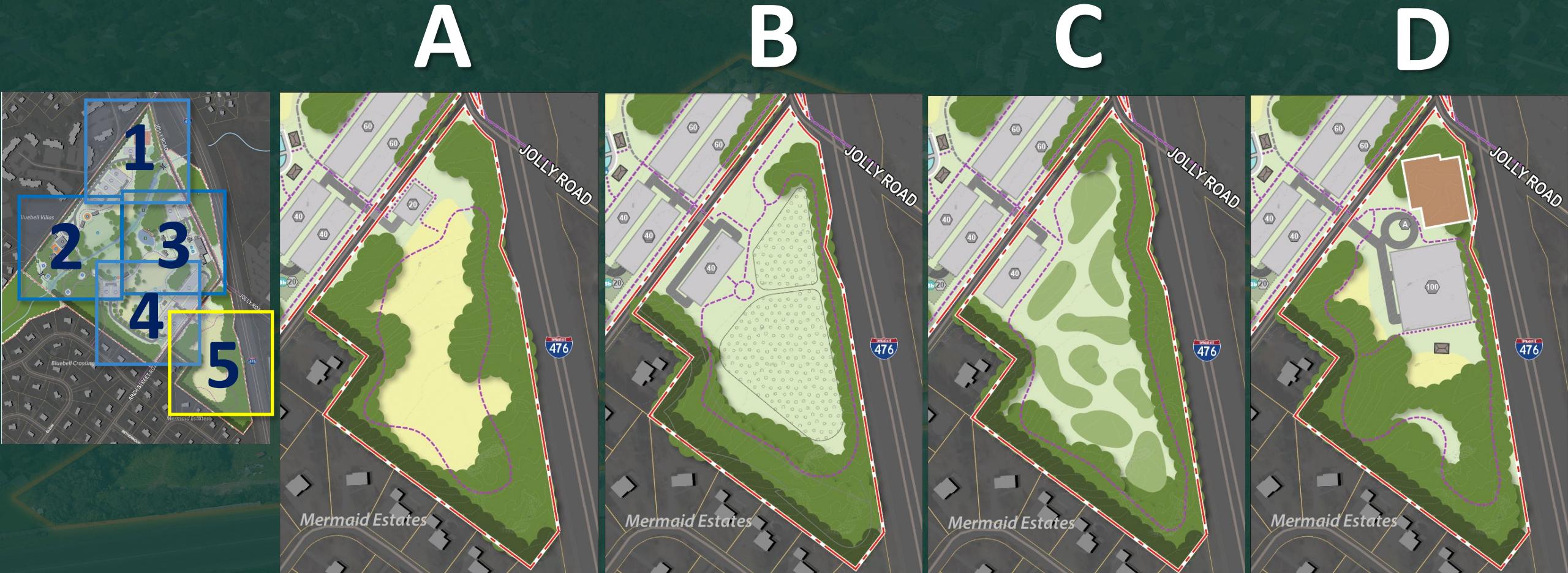
*Separate feasibility study required to determine exact size, amenities, location, etc.

*Phase 3 plan to include kiddie pool

- A. LEISURE POOL
- B. COMPETITION POOL
6 LANES WITH 8 LANE OPTION
- C. CONCESSIONS
- D. WOMEN'S DRESSING
- E. MAIN ENTRY / OFFICE / FIRST AID
- F. MEN'S DRESSING
- G. FILTER/STORAGE BUILDING



Arch Street Road Parcel - Alternatives



A. Open Meadow

B. Dog Park

C. 9-hole chip & putt

D. Indoor Facility

Potential Future Traffic

Level of Service: Level of service (LOS) is a term used to describe the service level (wait time) of a roadway intersection.

Level of Service – Levels A Through F:

A



B



C



D



E



F



Wait Time:
None

Wait Time:
None

Wait Time:
Minimal

Wait Time:
Noticeable

Wait Time:
Irritating –
delays

Wait Time:
Very irritating –
long delays

Potential Future Traffic



Jolly & Wentz Intersection

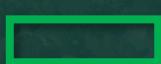


Jolly & Arch Intersection

Existing Level of Service

Intersection	AM Peak	PM Peak	Saturday Peak
Jolly and Arch Street Roads			
Eastbound Left/Right (from Arch)	D	D	D
Northbound Through/Left (from Jolly)	A	A	A
Southbound Through (from Jolly)	B	B	B
Southbound Right (from Jolly)	B	B	B
Jolly and Wentz Roads			
Westbound Left/Right (from Wentz)	C	D	C
Northbound Through/Right (from Jolly)	B	B	B
Southbound Through/Left (from Jolly)	A	A	A

Potential Future Traffic



Move up in LOS



Move down in LOS

***With signal timing adjustments – both intersections will operate at acceptable Levels of Service if Mermaid Lake Park is developed in accordance with the Master Plan.**

Projected Future Level of Service (LOS)

**Projected numbers generated using existing lane configuration & re-timing of traffic signals*

Intersection	AM Peak	PM Peak	Saturday Peak
Jolly and Arch Street Roads			
Eastbound Left/Right (from Arch)	C	C	C
Northbound Through/Left (from Jolly)	A	B	B
Southbound Through (from Jolly)	B	B	B
Southbound Right (from Jolly)	B	B	B
Jolly and Wentz Roads			
Westbound Left/Right (from Wentz)	C	C	C
Northbound Through/Right (from Jolly)	B	B	B
Southbound Through/Left (from Jolly)	A	B	A

Order of Magnitude Costs

Farmstead Event Space	\$ 8,127,600
Pool	\$ 4,854,100
Nature Base Inclusive Play Grounds	\$ 2,092,700
Day Camp Area	\$ 5,224,600
Pickleball Court	\$ 884,500
Recreation Trail Loop	\$ 776,900
Stream Restoration & Riparian Buffers	\$ 5,333,400
Concept A - Open Meadow / Trail	\$ 768,500
Utilities	\$ 819,000
Total Estimated Project Costs \$ 28,881,300	

- *This is a long-term process: Not all elements will be built at once, completion of all phases likely 15+ years.*

*Current estimates carry a 25% contingency,
Reduced contingency to 10% in Phase 3*



Next Steps

Approval From Board of Supervisors to advance to Phase 3

Next Steps for Consultant Team August-December 2021:

- Refine Master Plan
- Refine Cost Estimate
- Assemble Draft Report
- Economic pro forma for up to 4 activities / facilities [4Ward Planning)

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Discussion



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Contact Information

Simone Collins Landscape Architecture

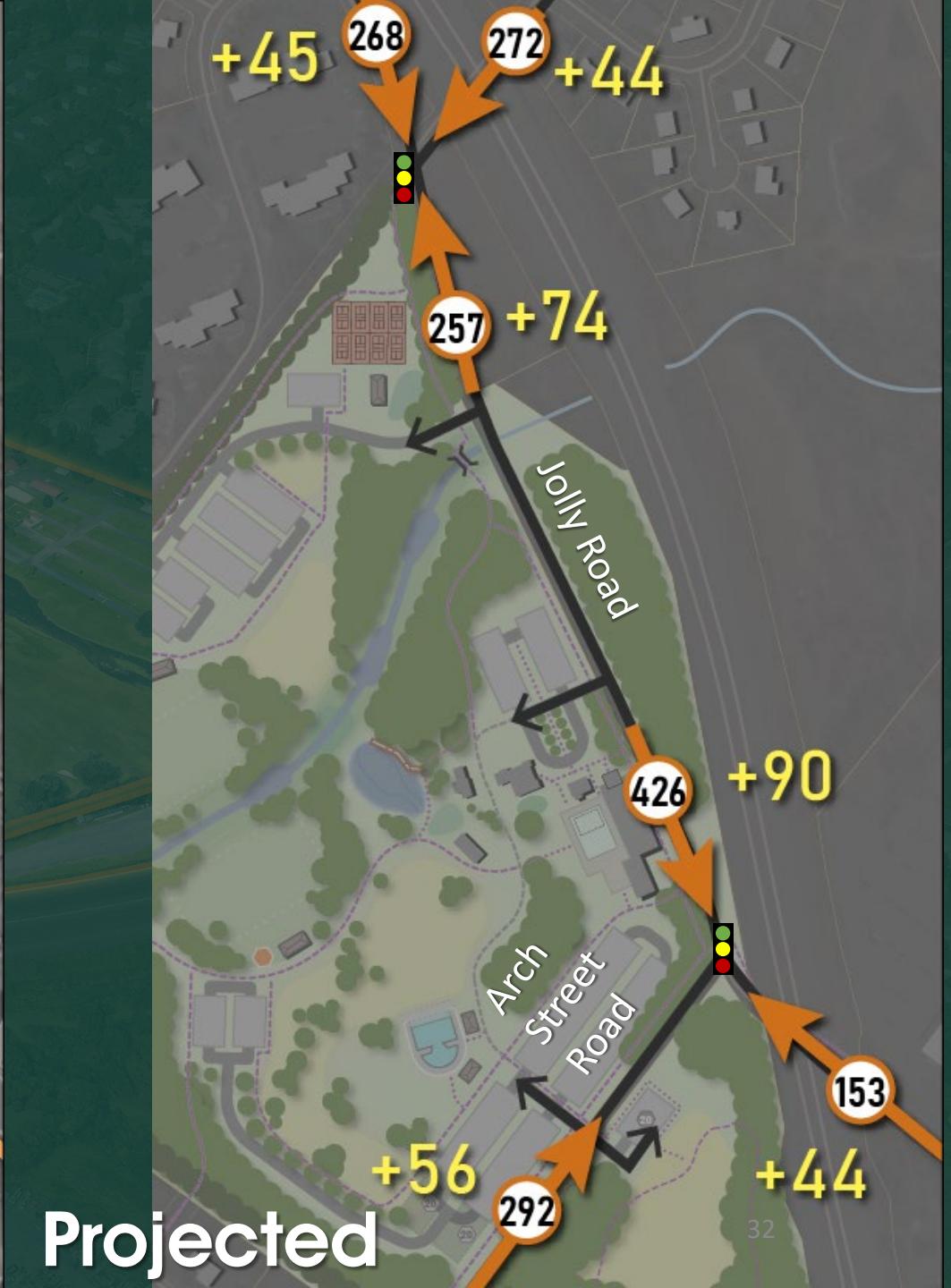
- **610.239.7601**
 - **Peter Simone:** psimone@simonecollins.com
 - **Sarah Leeper:** sleeper@simonecollins.com
 - **Joe Wallace:** jwallace@simonecollins.com

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Potential Future Traffic

A.M. Peak Traffic Volumes

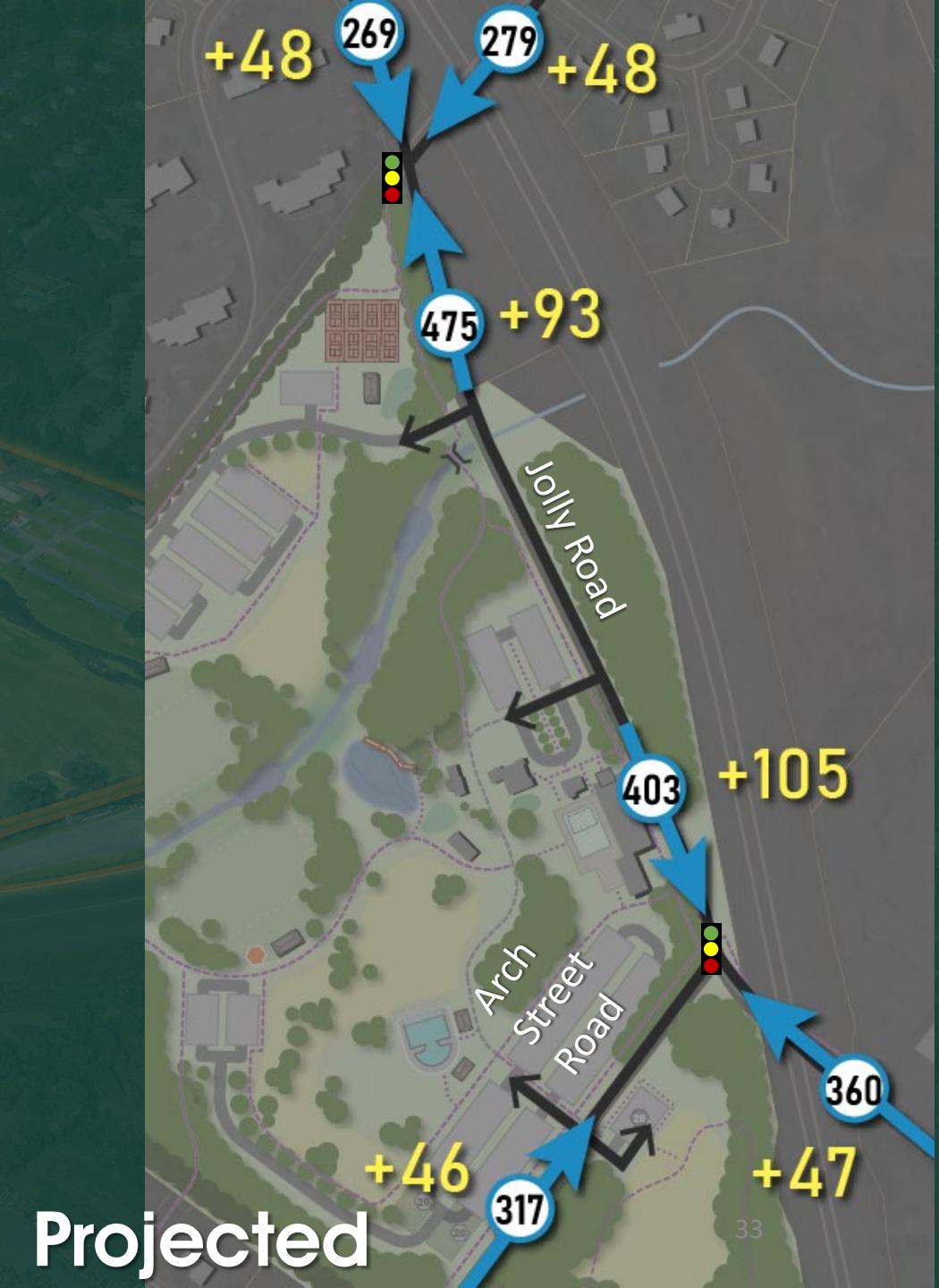


Potential Future Traffic

P.M. Peak Traffic Volumes



Existing



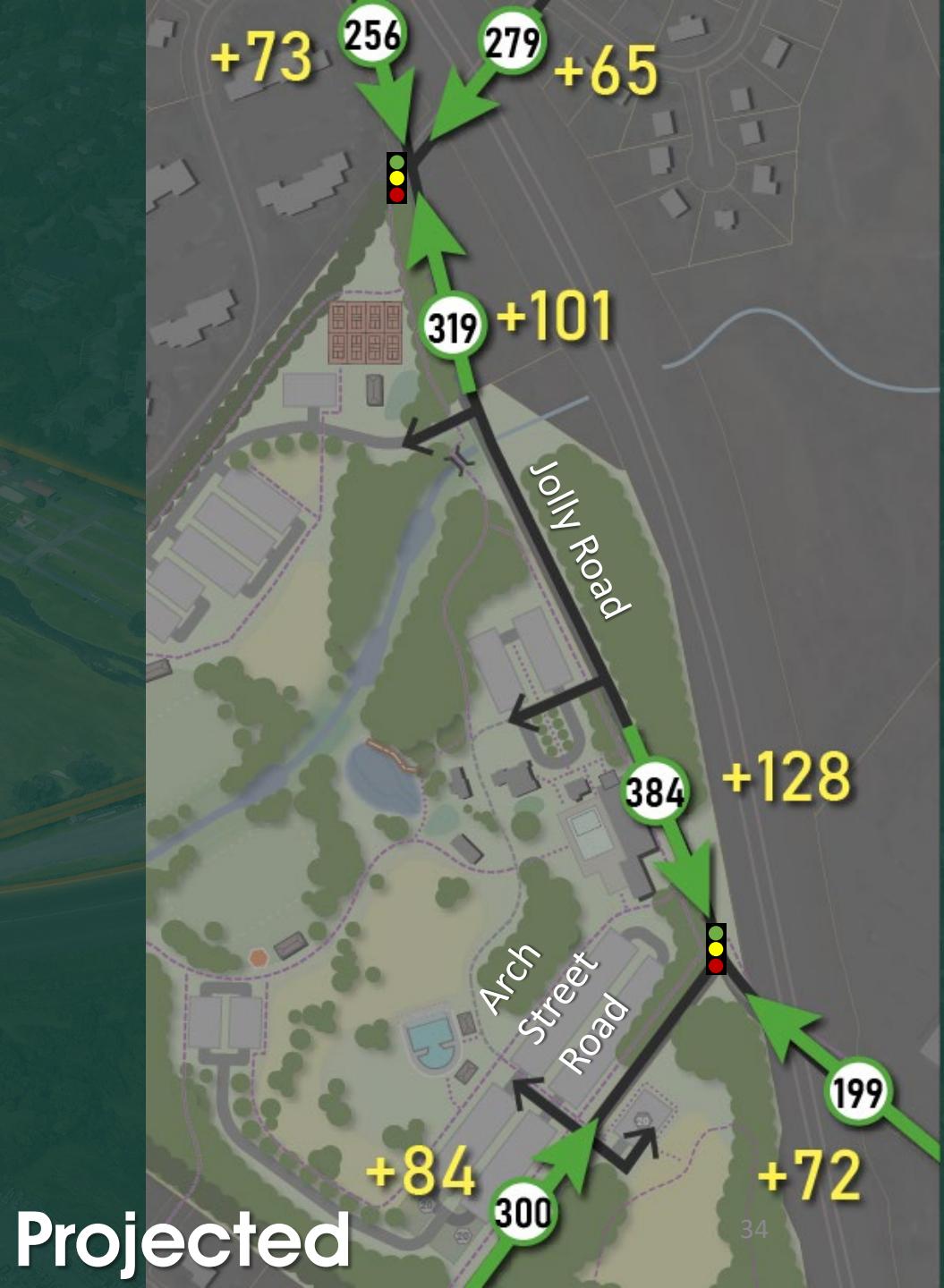
Projected

Potential Future Traffic

Saturday Peak Traffic Volumes



Existing



Projected