

# *Bee Run*

*sutton lake, wv*

## Bee Run Master Plan Draft August 23, 2012

**BCDA** Braxton County  
Development Authority



**PARSONS  
BRINCKERHOFF**

# *Master Plan*



# Bee Run

sutton lake, wv



# Master Plan



# *Bee Run*

*sutton lake, wv*



*Master Plan*



# Bee Run

sutton lake, wv

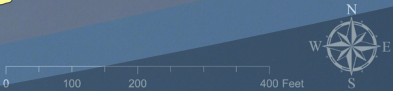
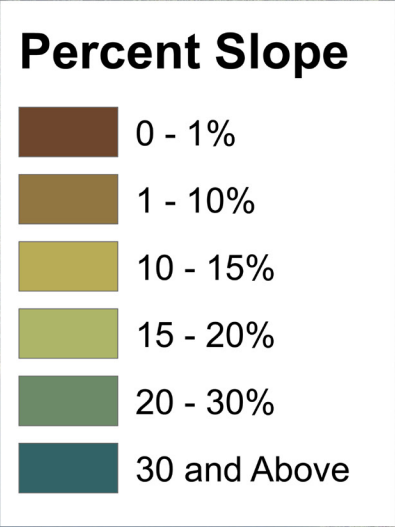


# Master Plan



# Bee Run

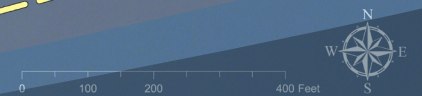
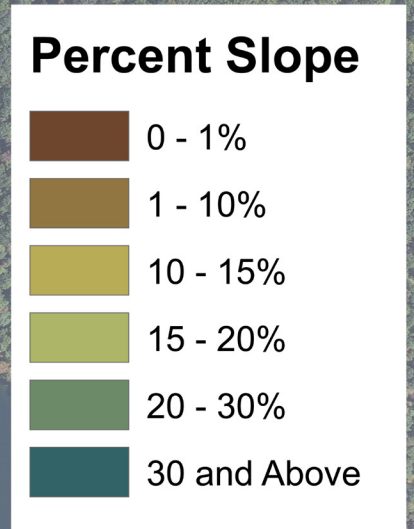
sutton lake, wv



Master Plan



sutton lake, wv



# Master Plan



# *Bee Run*

*sutton lake, wv*

# ADVENTURE RIDGE



# *Master Plan*



# Bee Run

sutton lake, wv

## LODGING ZONE



Master Plan



# Bee Run

sutton lake, wv

# DAY-USE ZONE



# Master Plan



# *Bee Run*

*sutton lake, wv*

# ADVENTURE RIDGE



0 100 200 400 Feet



# *Master Plan*



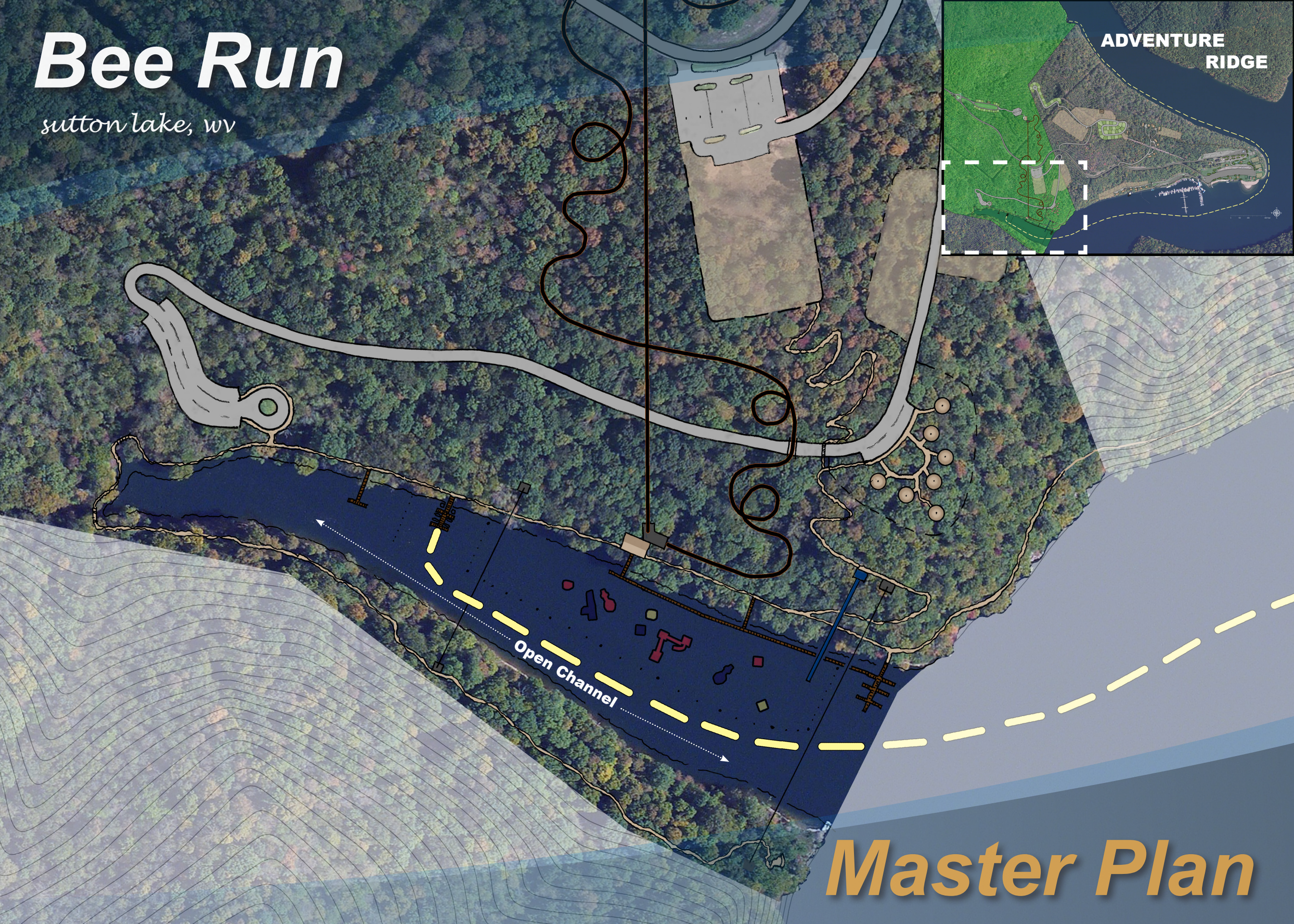
# Bee Run

sutton lake, wv

ADVENTURE  
RIDGE

Open Channel

Master Plan





# Bee Run

sutton lake, wv



**A**  
Pedestrian Access

Open Channel

# Master Plan



# Bee Run

sutton lake, wv



**A**  
Pedestrian Access

**B**  
Day-Use Dock

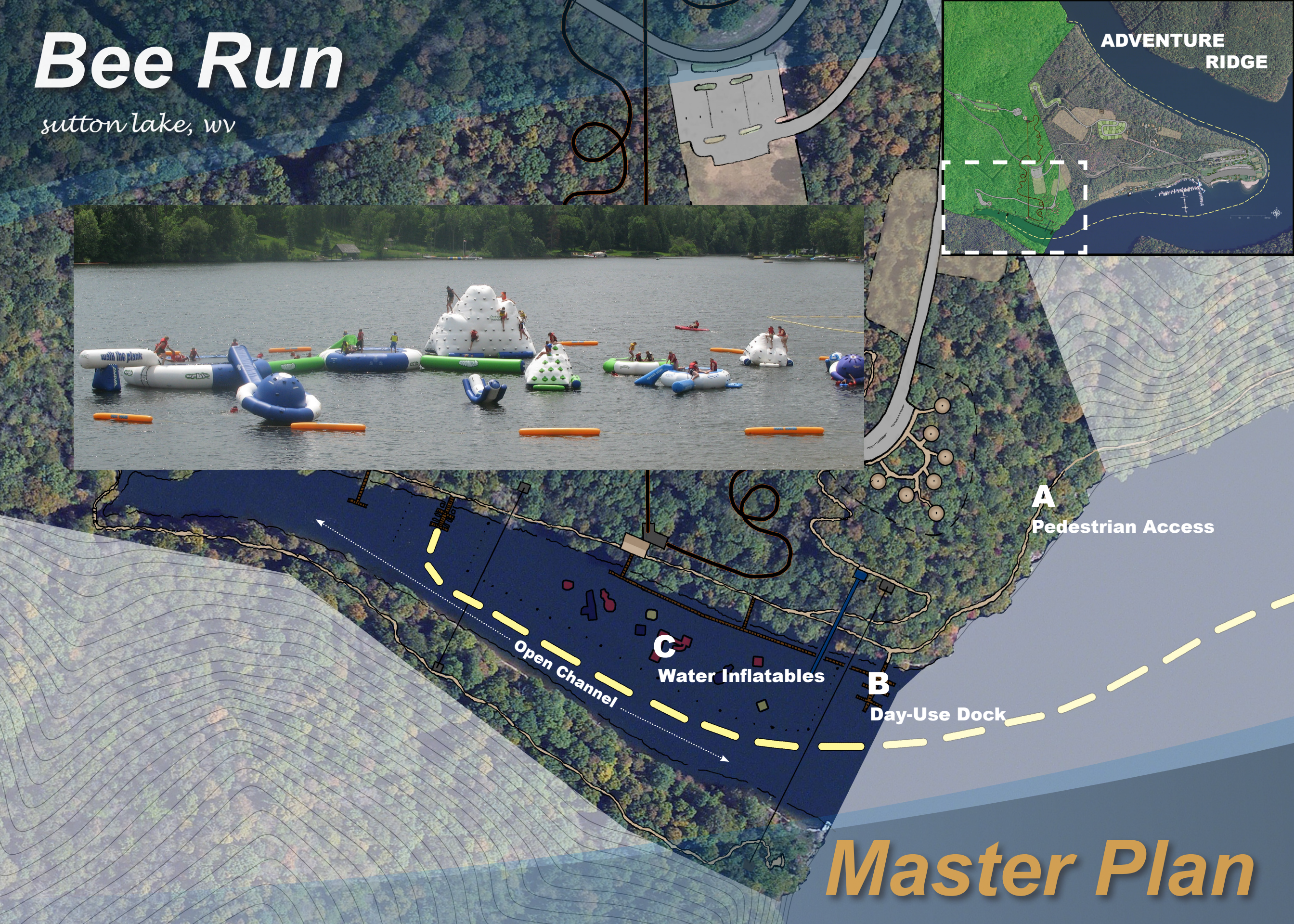
Open Channel

## Master Plan



# Bee Run

sutton lake, wv



## Master Plan



# Bee Run

sutton lake, wv



**A**  
Pedestrian Access

**B**  
Day-Use Dock

**C**  
Water Inflatables

**D**  
Lookout Point

Open Channel

## Master Plan



# Bee Run

sutton lake, wv

**D**

Lookout Point

**K**

Yurt Village

**C**

Water Inflatables

**B**

Day-Use Dock

**A**

Pedestrian Access

Waterfront Cabins



Sutton Lake Marina



# Master Plan



# Bee Run

sutton lake, wv



**A**  
Pedestrian Access

**E**  
Rental Shop /  
Snack Bar

**C**  
Water Inflatables

**B**  
Day-Use Dock

Lookout Point  
**D**

Open Channel

# Master Plan





# Bee Run

sutton lake, wv



**F**  
Zipline

**E**  
Rental Shop /  
Snack Bar

**C**  
Water Inflatables

**B**  
Day-Use Dock

Lookout Point  
**D**

Open Channel

# Master Plan



# Bee Run

sutton lake, wv



## Master Plan



# Bee Run

sutton lake, wv



ADVENTURE  
RIDGE



H  
Fishing Pier

G  
On W  
Kayak  
Paddl



Access

Lookout Point

D

# Master Plan



# Bee Run

sutton lake, wv



**I**  
56 Parking Spaces

**H**  
Fishing Pier

**F**  
Zipline

**G**  
On Water  
Kayaks, Canoes,  
Paddle Boats

**E**  
Rental Shop /  
Snack Bar

**C**  
Water Inflatables

**B**  
Day-Use Dock

**A**  
Pedestrian Access

Lookout Point

**D**

Open Channel

# Master Plan



# Bee Run

sutton lake, wv



## Master Plan



# Bee Run

sutton lake, wv



Future Yurt Area

56 Parking Spaces

H Fishing Pier

F Zipline

A Pedestrian Access

E Rental Shop /  
Snack Bar

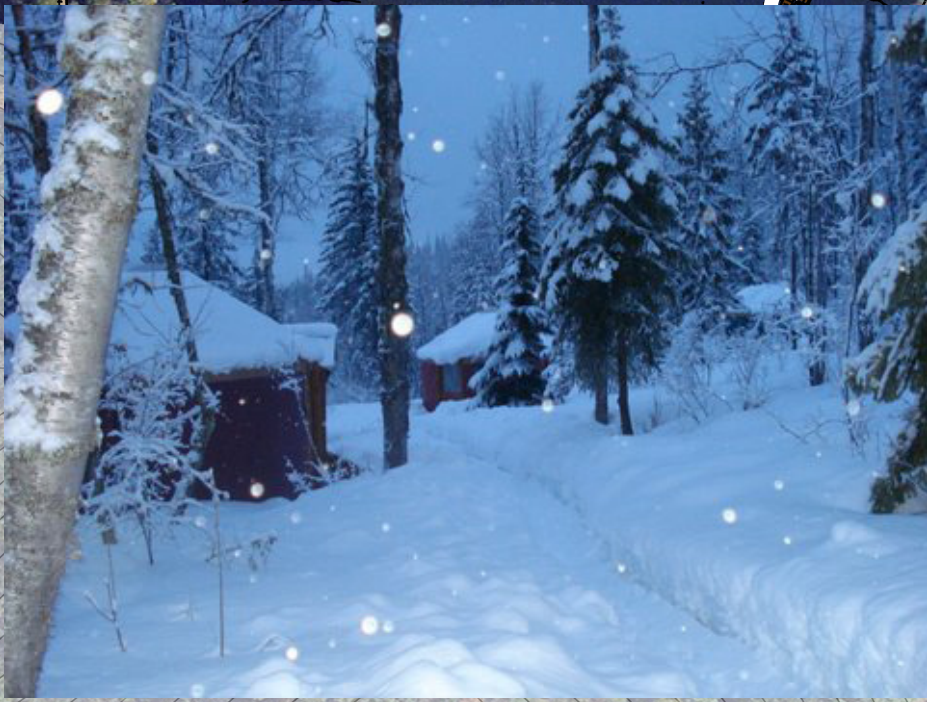
er  
, Canoes,  
Boats

C Water Inflatables

B Day-Use Dock

Lookout Point  
D

Open Channel



# Master Plan



# Bee Run

sutton lake, wv



ADVENTURE  
RIDGE

L  
Group Camping

Future Yurt Area

J  
Alpine Coaster



estrian Access

F  
Zipline

G  
On Water  
Kayaks, Canoes,  
Paddle Boats

E  
Rental  
Snack

C  
Water Inflatables

B  
Day-Use Dock

Lookout Point

D

Master Plan



# Bee Run

sutton lake, wv



**L**  
Group Camping

Future Yurt Area

**J**  
Alpine Coaster

**I**  
56 Parking Spaces

**K**  
Yurt Village

**A**  
Pedestrian Access

**H**  
Fishing Pier

**F**  
Zipline

**G**  
On Water  
Kayaks, Canoes,  
Paddle Boats

**E**  
Rental Shop /  
Snack Bar

**C**  
Water Inflatables

**B**  
Day-Use Dock

Lookout Point  
**D**

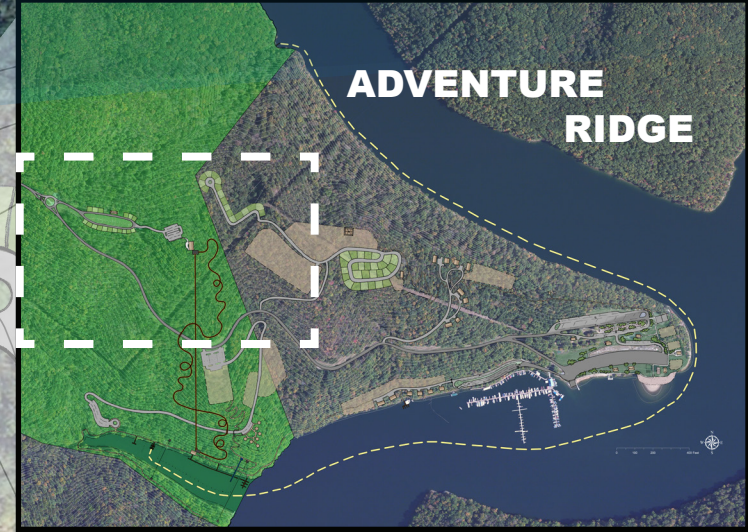
Open Channel

*Master Plan*



# Bee Run

sutton lake, wv



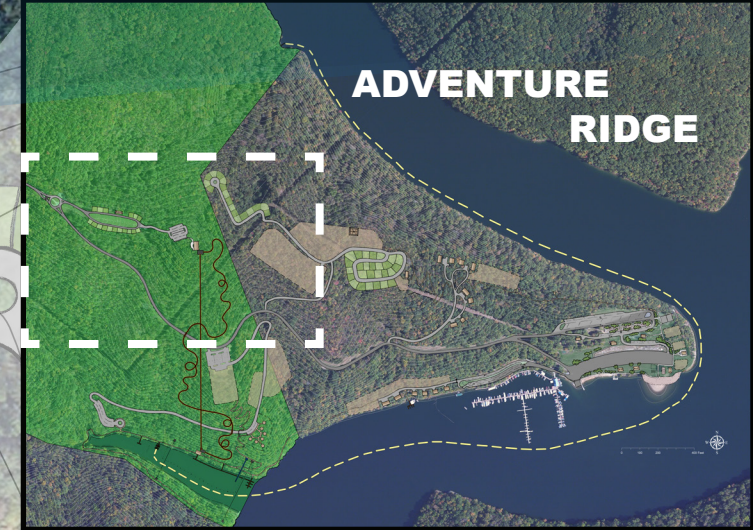
*Master Plan*



# Bee Run

sutton lake, wv

**A**  
Zip line/Rope Course

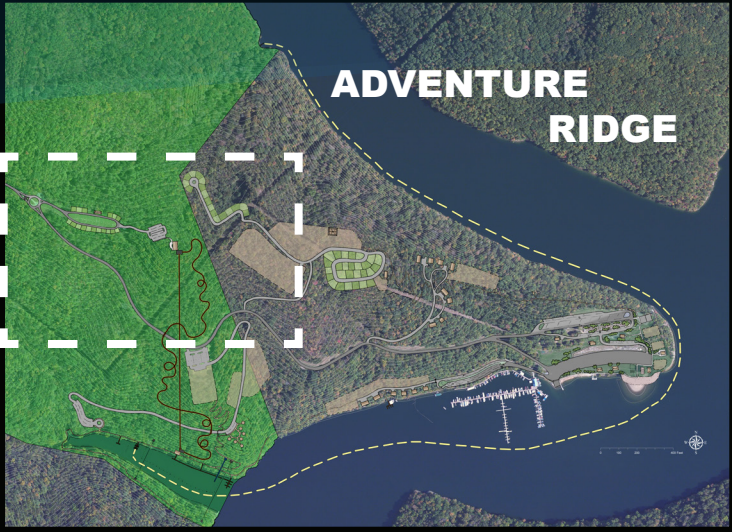


*Master Plan*



# Bee Run

sutton lake, wv



**A**  
Zip line/Rope Course

**B**  
Adventure Ridge Center

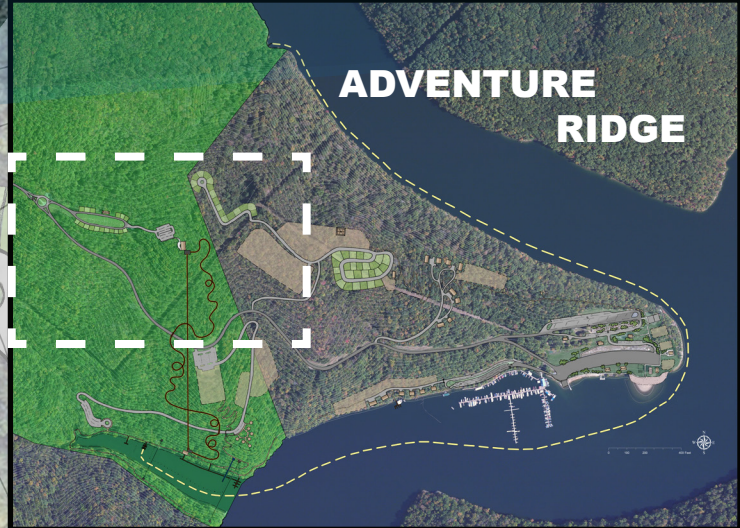


*Master Plan*



# Bee Run

sutton lake, wv



**C**  
RV Pull Through Sites  
Wooded Camp Sites

**B**  
Adventure Ridge Center

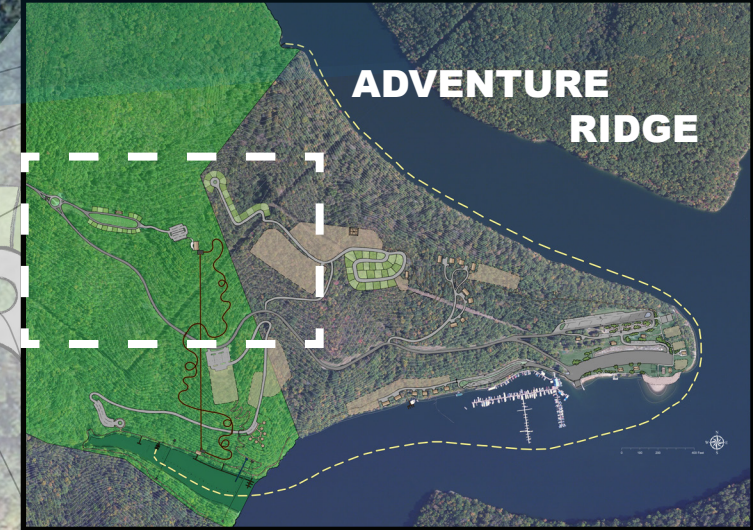
**A**  
Zip line/Rope Course

*Master Plan*



# Bee Run

sutton lake, wv



**D**  
Bathhouse

**C**  
RV Pull Through Sites  
Wooded Camp Sites

**A**  
Zip line/Rope Course



*Master Plan*

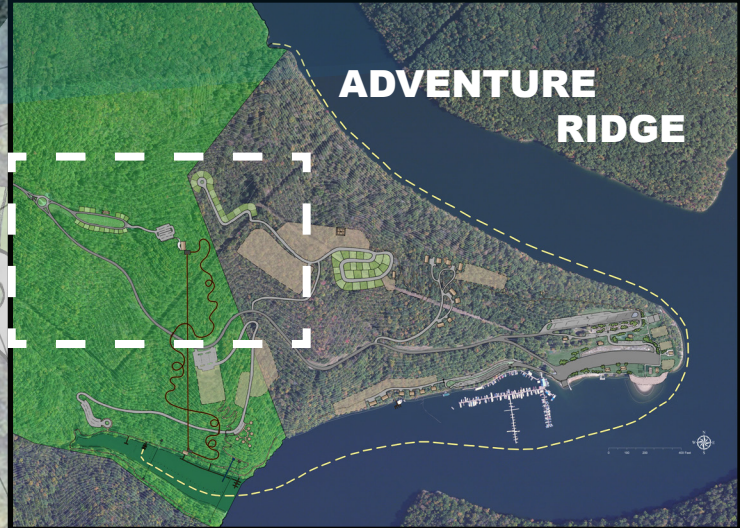


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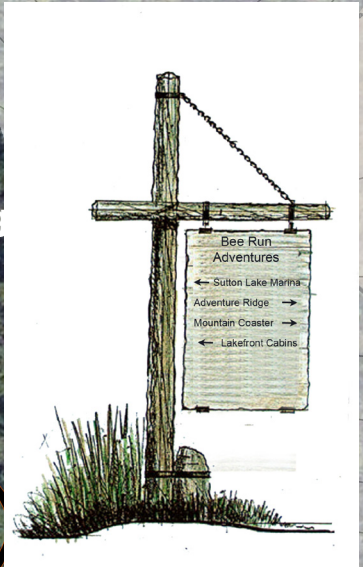
sutton lake, wv

E  
Gate House

C  
RV P  
Woo



Adventure Ridge



# Master Plan

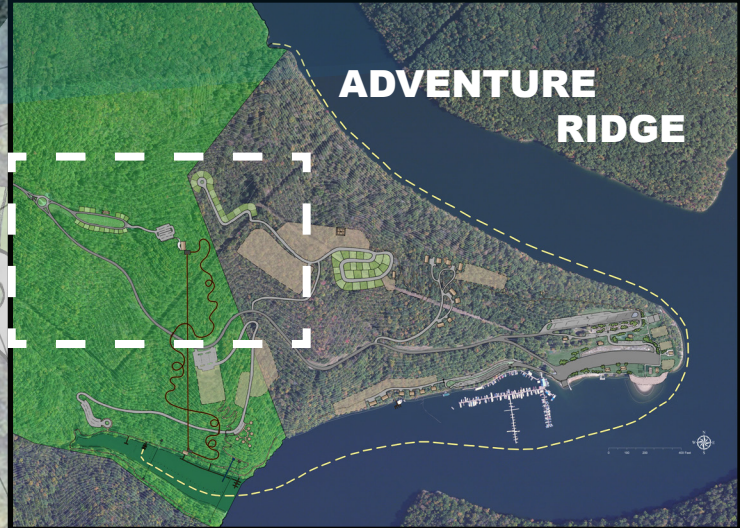


# Bee Run

sutton lake, wv

E  
Gate House

A  
Zip L



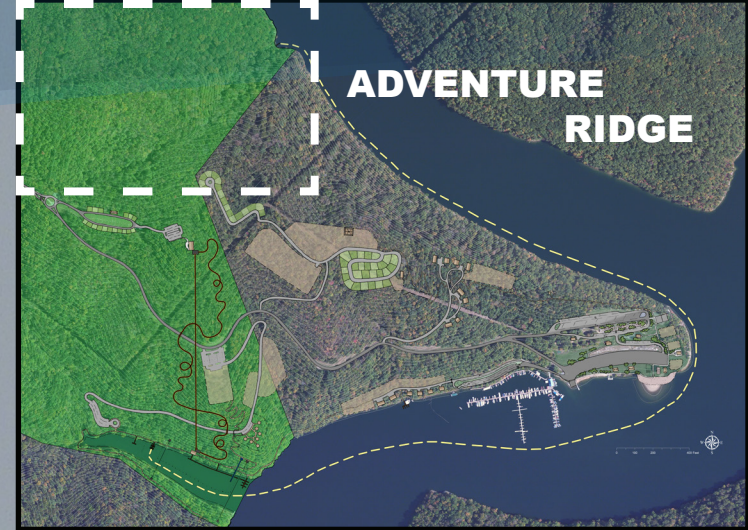
Adventure Ridge Center

Master Plan



# *Bee Run*

*sutton lake, wv*



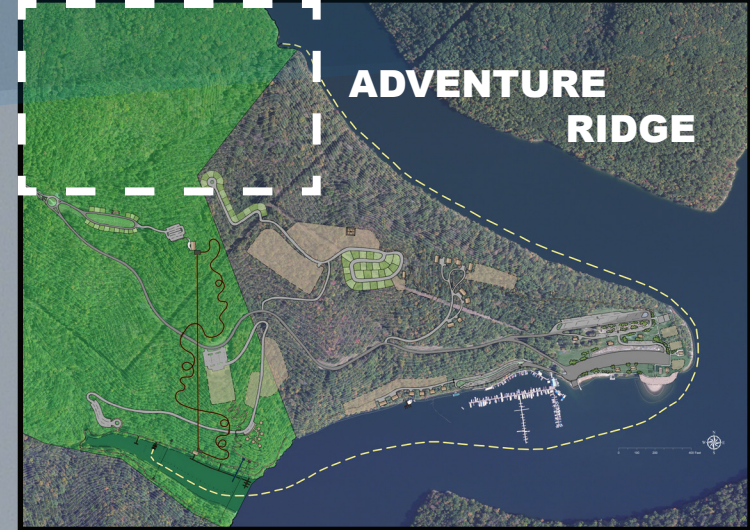
*Master Plan*



# Bee Run

sutton lake, wv

**A**  
Mountain Bike Area



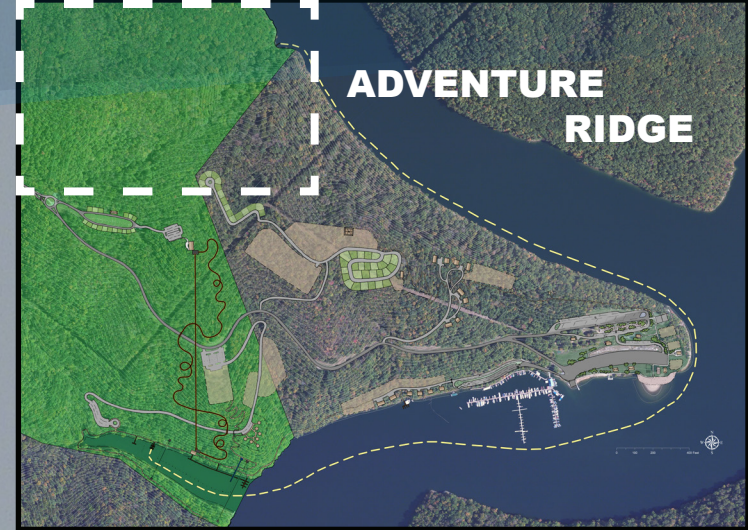
*Master Plan*



# Bee Run

sutton lake, wv

**B**  
Kayak Tours



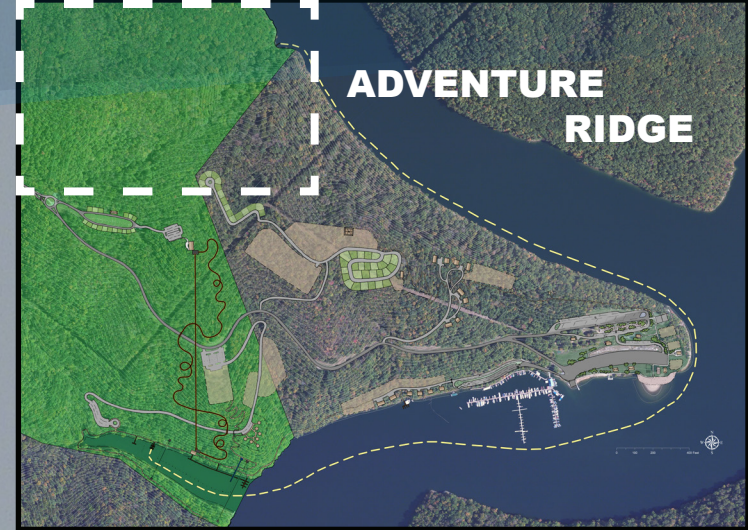
*Master Plan*



# Bee Run

sutton lake, wv

**B**  
Kayak Tours



**C**  
Frisbee Golf



*Master Plan*



# Bee Run

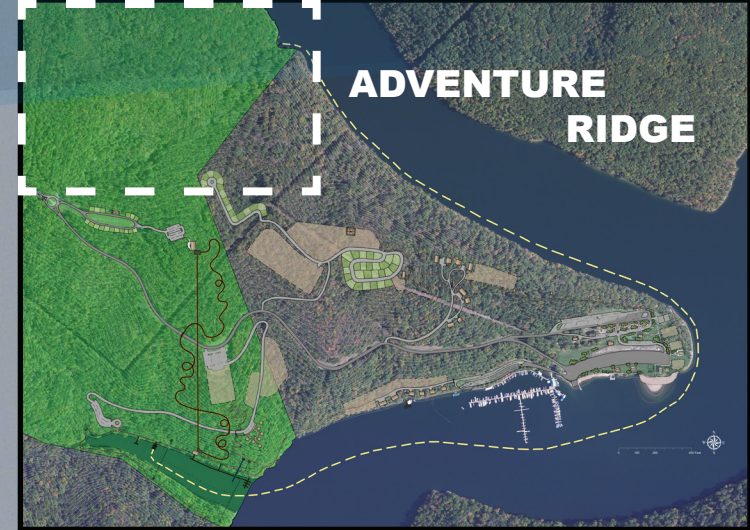
sutton lake, wv

**D**  
Paintball

**B**  
Kayak Tours

**A**  
Mountain Bike Area

**C**  
Frisbee Golf



*Master Plan*



# Bee Run

sutton lake, wv

## LODGING ZONE



Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv



*Master Plan*



# Bee Run

sutton lake, wv



**A**  
Waterfront Cabins

*Master Plan*



# Bee Run

sutton lake, wv



## Master Plan



# Bee Run

sutton lake, wv



**A**  
Boat Storage

*Master Plan*



# Bee Run

sutton lake, wv

**B**  
17 Camping Spaces

**A**  
Boat Storage

LODGING  
ZONE

*Master Plan*





# Bee Run

sutton lake, wv



**B**  
17 Camping Spaces

**A**  
Boat Storage

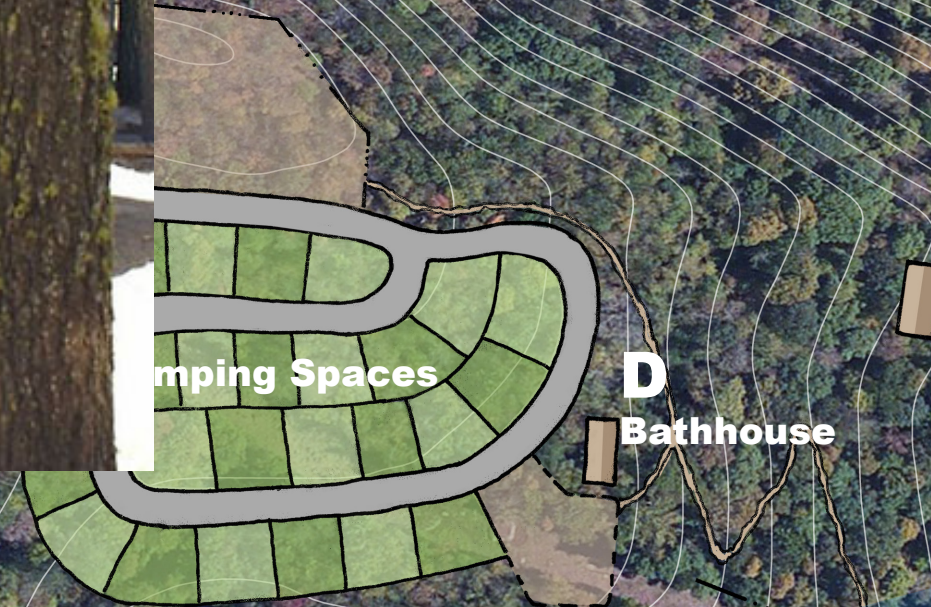
**C**  
27 Camping Spaces

*Master Plan*



# Bee Run

sutton lake, wv



## Master Plan



# Bee Run

sutton lake, wv



**B**  
17 Camping Spaces

**A**  
Boat Storage

**C**  
27 Camping Spaces

**D**  
Bathhouse

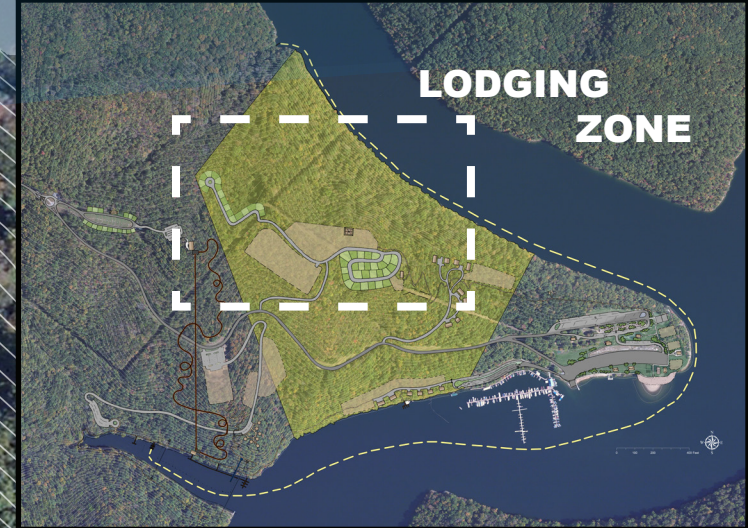
**E**  
Playground

## Master Plan



# Bee Run

sutton lake, wv



**B**  
17 Camping Spaces

**A**  
Boat Storage

**C**  
27 Camping Spaces

**D**  
Bathhouse

**E**  
Playground

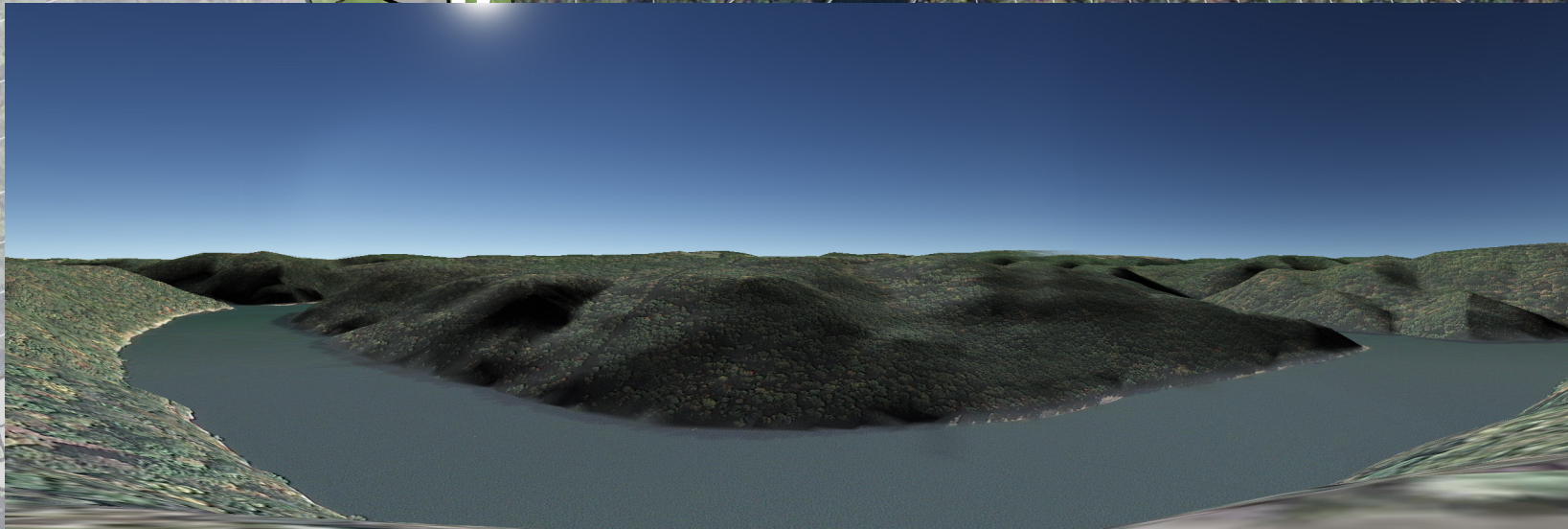
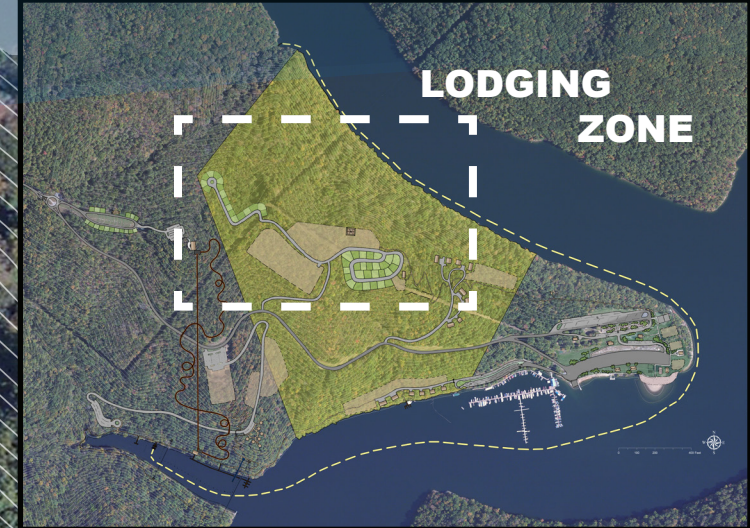
**F**  
Realignment Of Utility

## Master Plan



# Bee Run

sutton lake, wv



**A**  
Boat Storage

**G**  
Restaurant

**C**  
27 Camping Spaces

**D**  
Bathhouse

**E**  
Playground

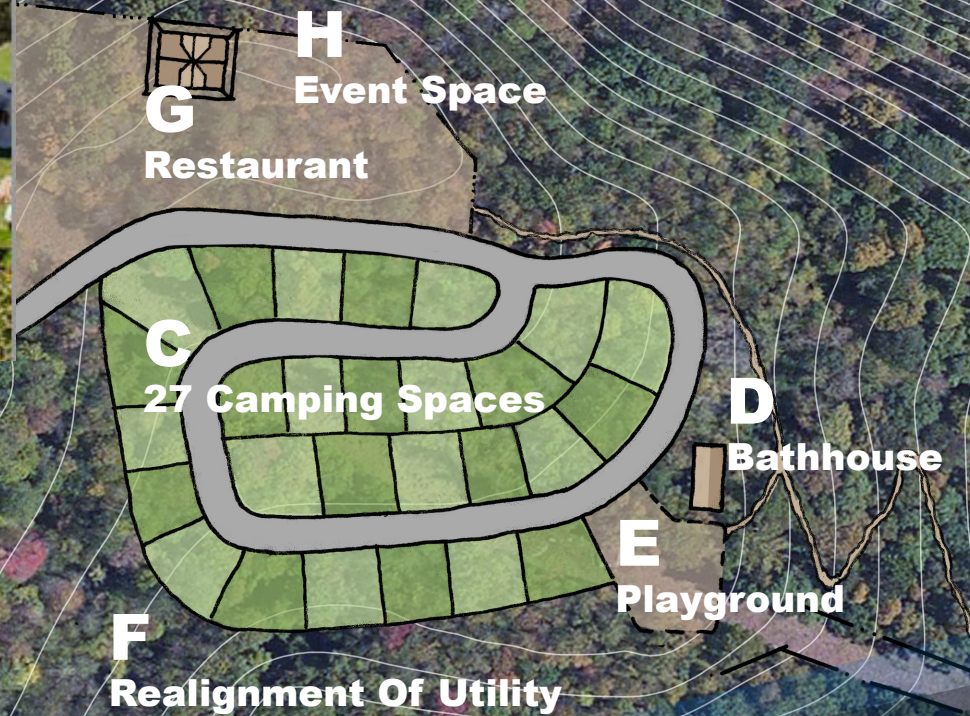
**F**  
Realignment Of Utility

## Master Plan



# Bee Run

sutton lake, wv

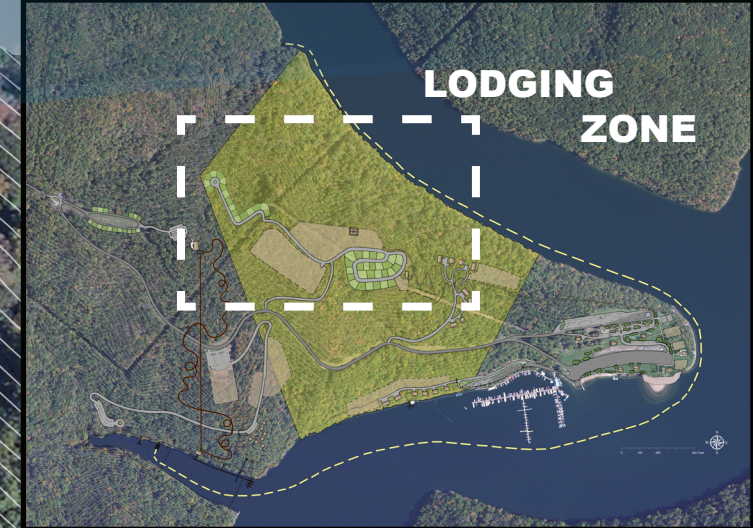


## Master Plan



# Bee Run

sutton lake, wv



**B**  
17 Camping Spaces

**A**  
Boat Storage

**I**  
Future Lodge and  
Waterpark Location

**G**  
Restaurant

**H**  
Event Space

**C**  
27 Camping Spaces

**D**  
Bathhouse

**E**  
Playground

**F**  
Realignment Of Utility

# Master Plan



# Bee Run

sutton lake, wv



## Master Plan



# Bee Run

sutton lake, wv



**A**  
Grandview Cabins

Future Cabin Area



# Master Plan



# Bee Run

sutton lake, wv

**Final Phase Lodging**



**Master Plan**



# Bee Run

sutton lake, wv

# DAY-USE ZONE



# Master Plan



# Bee Run

sutton lake, wv

DAY-USE  
ZONE

# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

DAY-USE  
ZONE



# Master Plan

0 100 200 400 Feet



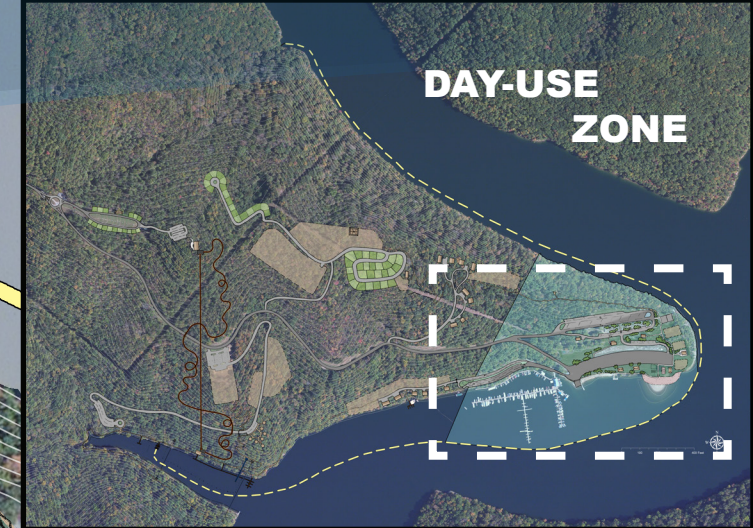


# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

DAY-USE  
ZONE

# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

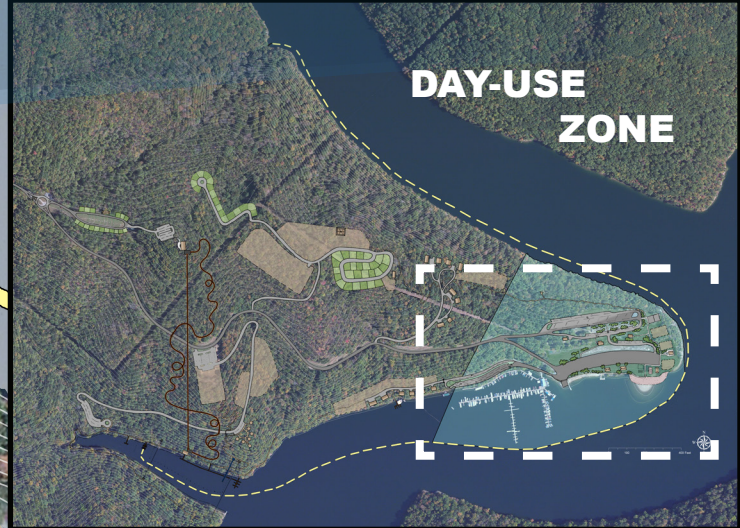


**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces



**D** Multi-Purpose Sports Court

DAY-USE  
ZONE



# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

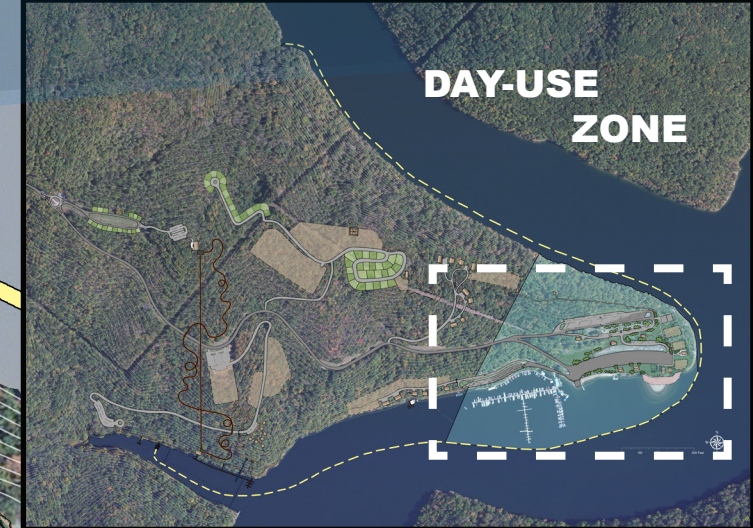


**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing  
106 Car  
47 Boat

**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area



DAY-USE  
ZONE

# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area

**F** Playground

DAY-USE  
ZONE

# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot

**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area

**F** Playground

**G** Picnic Point

DAY-USE  
ZONE

# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

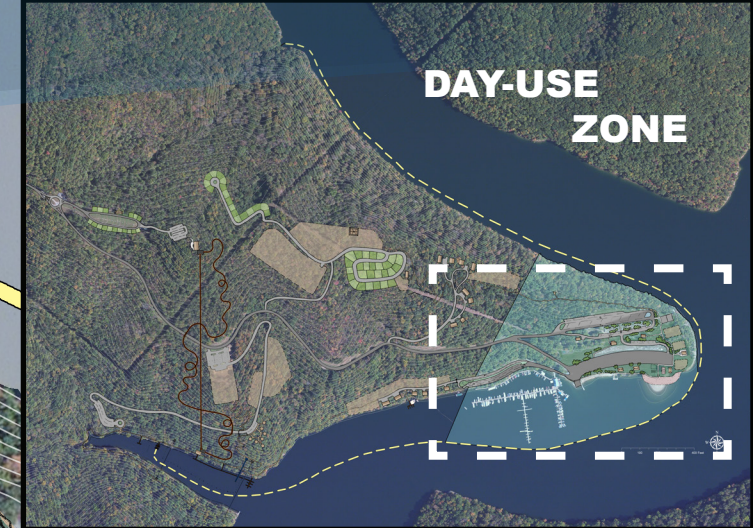
**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area

**F** Playground

**G** Picnic Point

**H** Volleyball Court



# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

**I**  
Bocce Ball  
Horseshoe Pit  
Yard Games

**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area

**F** Playground

**G** Picnic Point

**H** Volleyball Court

DAY-USE  
ZONE

# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

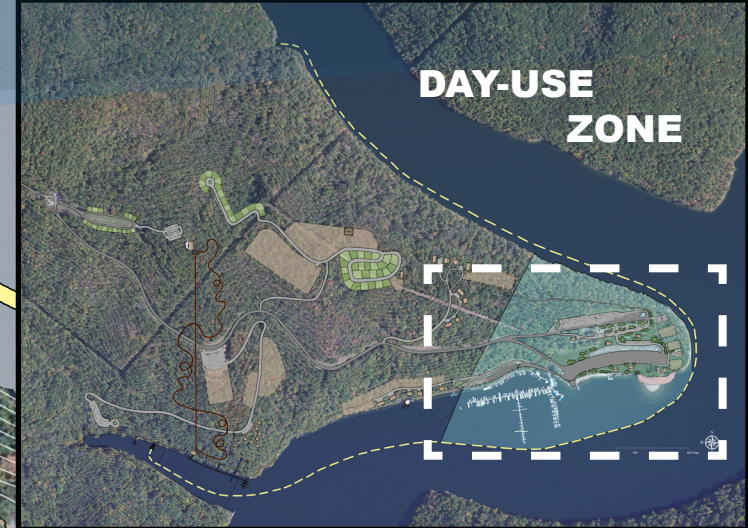
**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area

**F** Playground

**G** Picnic Point

**H** Volleyball Court  
**I** Bocce Ball  
Horseshoe Pit  
Yard Games  
**J** Expanded Beach



# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

**K**  
Pavilions  
Bocce Ball  
Horseshoe Pit  
Yard Games

**D** Multi-Purpose Sports Court

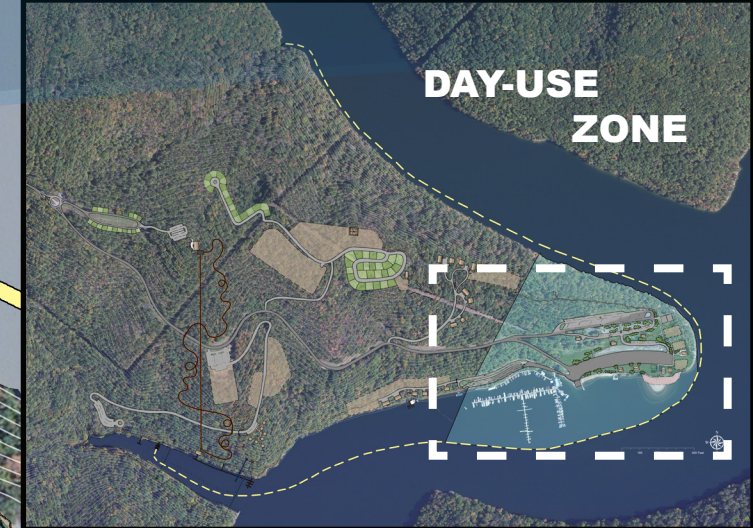
**E** Mixed-Use Skating Area

**F** Playground

**G** Picnic Point

**H** Volleyball Court

Expanded Beach



# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv

**A**  
Overlook On Trail

**B**  
Upper Parking Lot  
66 Car Spaces  
50 Boat/Trailer  
Lower Parking Lot  
38 car Spaces

**C**  
Existing Parking Lot  
106 Car Spaces  
47 Boat/Trailer

**L**  
Enlarged Parking Lot  
108 Car Spaces

**D** Multi-Purpose Sports Court

**E** Mixed-Use Skating Area

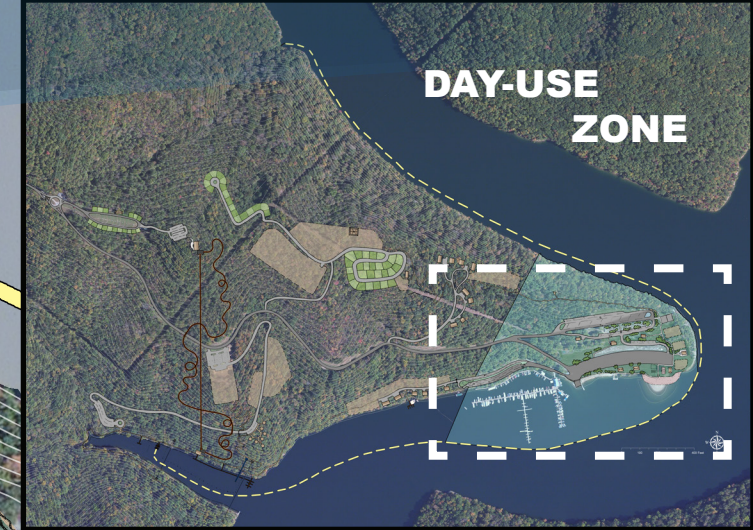
**F** Playground

**G** Picnic Point

**H** Volleyball Court

**K**  
Pavilions  
Bocce Ball  
Horseshoe Pit  
Yard Games

Expanded Beach



# Master Plan

0 100 200 400 Feet





# Bee Run

sutton lake, wv



30' Boats

WATERFRONT CABINS WITH  
PRIVATE DOCK

40'-50'  
Boats

30' Boats

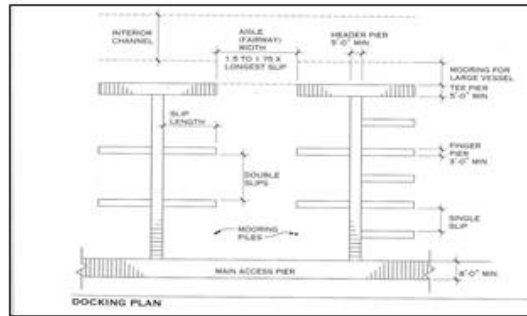
## Master Plan



# Bee Run

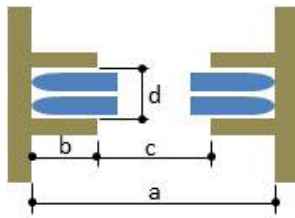
sutton lake, wv

## Dock and Marine Development Standards



BOAT LENGTH	SLIP LENGTH	SINGLE SLIP WIDTH	DOUBL SLIP WIDTH
20	23	10	20
25	28	12	25
30	33	14	27
35	38	15	31
40	43	18	34
45	48	19	36
50	53	20	38
55	58	22	42
60	63	23	44

## Recommended Slip Dimensions



Boat Size (Max)	a	b	c	d
30'	84'-90'	24'	36'-42'	27'
40'	112'-120'	32'	48'-56'	34'
50'	140'-150'	40'	60'-70'	38'

### EXISTING DOCK CONDITIONS AND OBSERVATIONS

- There are 4 docks designated as docks A, B, C and D.
- Dock D is the newest addition to the network.
- All docks were recently upgraded.
- Available Slips: 232 total (Docks A= 35, B=92, C=53 and D=52)
- Most slips are double loaded.
- The typical width of double loaded slips is approximately 20', However, there are some along the south edge of dock B that are approximately 28' wide.
- In many cases the larger boat sizes are underserved by the size of the slips.
- The majority of slips have a finger dock size of 5'x20', with a few finger docks up to 26'-60' in length distributed among the 4 main docks. Dock development standards suggest a finger dock size of approximately 80% of the boat length. Many of the larger boat slips may require larger finger docks.
- Dock A appears to become unusable during times when the lake water level is low.

### ASSUMPTIONS

- The average size of boats that the marina serves range in size from 20' to 50' in length, based on data found on Marina website for Dock B. The exception are rented house boats that are 14'x59' in size and rented paddle boats.
- The marina serves a variety of boat types including pontoon, house boats, paddle boats, fishing boats and recreational / ski boats.
- An additional 150 slips are desired for the marina.

### RECOMMENDATIONS

- Consider zoning slips according to boat size and slip capacity.
- Add 4 new docks branching off dock B and extend dock B to facilitate 150 additional slips.
- Shift existing dock D one bay to the west to facilitate 2 additional docks for smaller boats.
- Provide longer finger docks for boats 40' and longer.
- Consider relocating Dock A slips to deeper water, potentially at the end of Dock B. The main dock could be as a pedestrian boardwalk to connect the marina to proposed cabins. The existing slips could also be removed or repurposed for additional cabins (floating cabins or on stilts) situated along dock A. Other amenities that could be added along dock A include a cabana, restaurant and dining platform.

# Master Plan



# Bee Run

WATERFRONT VIEW  
CABINS

sutton lake, wv

BATHHOUSE

FUTURE CABIN  
EXPANSION AREA

LOOKOUT

## Marina and Option B

BASKETBALL

ARTIFICIAL ICE RINK  
OR SKATE PARK

PLAYGROUND

PICNIC POINT

Lodge Parking

Lodge With Indoor  
Waterpark

106 CARS

VOLLEYBALL  
COURT

PAVILIONS

106 CARS  
47 BOAT/TRAILER  
PARKING SPACES

Centralized Beach Location

Proposed Marina Location

# Master Plan



# Bee Run

sutton lake, wv



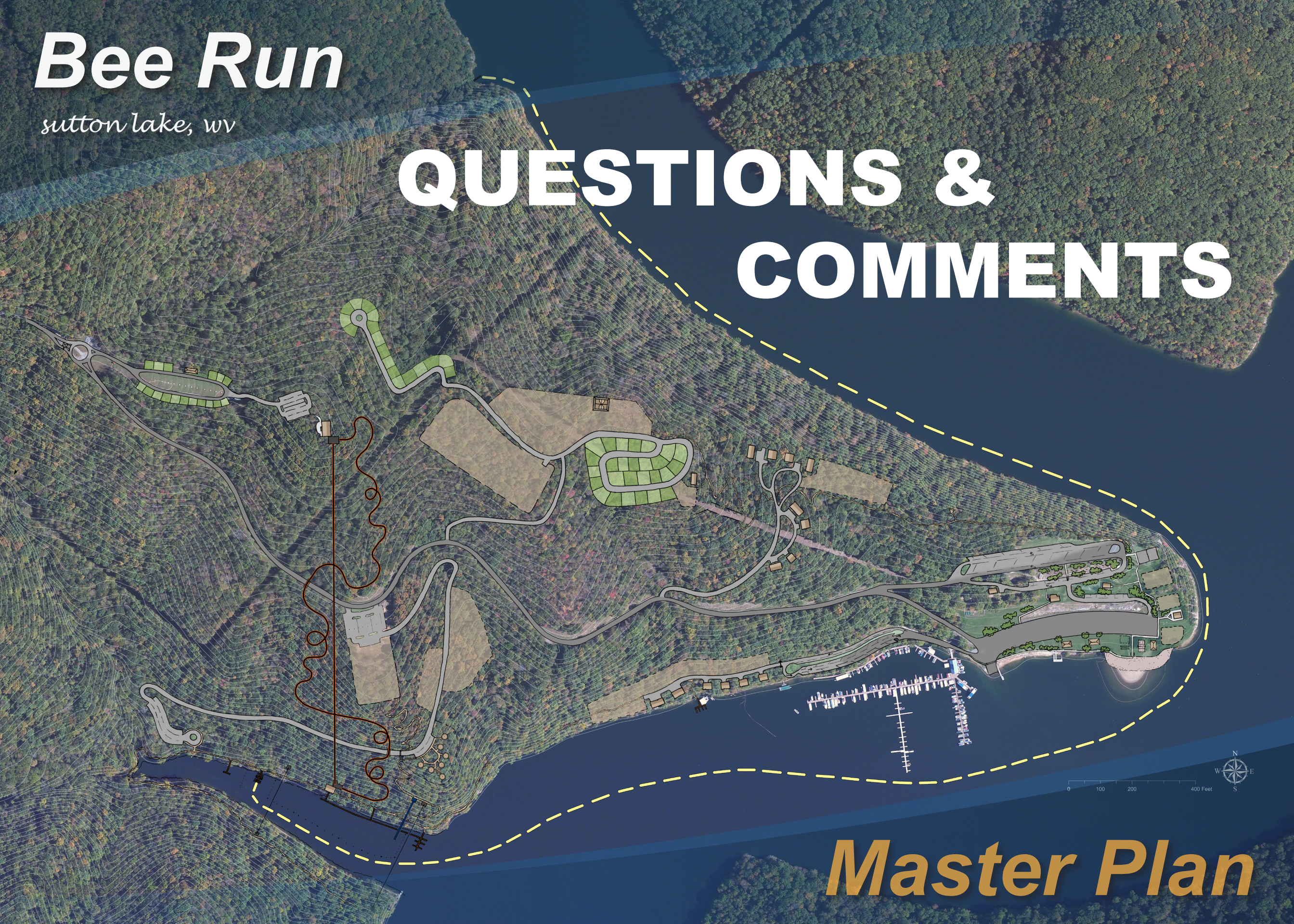
# Master Plan



# Bee Run

sutton lake, wv

## QUESTIONS & COMMENTS



*Master Plan*