

Lower Yahara River Trail Phase 2 Design Update

VIRTUAL PUBLIC INFORMATION MEETING

OCTOBER, 2020



Virtual Public Information Meeting

Due to COVID 19 related limitations of large group gatherings, Dane County is conducting a virtual Public Information Meeting to provide an online tour of planning considerations that guided design decisions for Phase 2 of the Lower Yahara River Trail.



Virtual Public Information Meeting

Information regarding how to provide input, ask questions or find out additional information can be found at the end of the presentation.

The January 15th, 2020 Lower Yahara River Trail Phase 2 Kick Off Planning meeting can be reviewed on the Dane County Parks website at: [Lower Yahara River Planning Information](#)



Meeting Overview

- ❑ INTRODUCTORY INFORMATION
- ❑ MEETING NOTIFICATIONS
- ❑ OVERVIEW OF TRAIL DESIGN AND PROPOSED TRAIL AMENITIES
- ❑ PROJECT TIMELINE & NEXT STEPS
- ❑ HOW TO PROVIDE PUBLIC COMMENTS AND ASK QUESTIONS



PHASE 2 LOWER YAHARA RIVER TRAIL

PLANNING TEAM

Project Contact: Chris James, Dane County Parks

Project Engineer: Sam Herheim; P.E., KL Engineering

Geotechnical Survey: Tim Gassenheimer; EIT, CGC, Inc.

Archaeological Survey: Robert Watson; Ph.D, Commonwealth Heritage Group

DNR Design Liaison: Jeff Prey, Dane County Parks

Environmental Field Review: Lars Higdon, Dane County Parks



MEETING PURPOSE

- ❑ Trail Design Updates for Neighbors, Stakeholders, Local Units of Government
- ❑ Opportunity to Share Hopes, Concerns, Comments & Questions



MEETING NOTIFICATION OUTREACH EFFORTS

Neighborhood Mailing

County Press Release

Stakeholder, Local Unit of Government Email

Legal Ad Posted to Madison Newspapers

Dane County Facebook Page

Dane County Parks Website



OVERVIEW OF PRIMARY DESIGN CONSIDERATIONS AND PROPOSED MAJOR TRAIL AMENITIES

-The following slides have been organized from west to east, beginning at Fish Camp County Park and progressing east to Lake Kegonsa State Park.



PHASE 2 LOWER YAHARA RIVER TRAIL

Lower Yahara River Trail Phase 2: Fish Camp County Park to Lake Kegonsa State Park Segment



Legend

- County Wildlife Land
- County Park Land
- County Resource Area

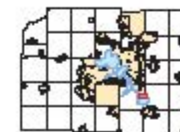
- Proposed Lower Yahara Trail: Phase 2
- Lower Yahara River Trail: Future Phase
- Proposed Bike/Pedestrian Bridge

EXHIBIT B: PROJECT AREA

Scale: 1" = 300'-0"



Map Revised: March 3, 2019



Source: Fish Camp County Parks and Lake Kegonsa State Park. Map created by Dane County Parks.



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL AMENITIES-FISH CAMP TRAILHEAD

- An approximate 16 car parking lot with a kiosk and bike racks is proposed to be constructed on the east side of the Fish Camp net house.
- The parking lot will provide access to both the Lower Yahara River Trail and future accessible shoreline improvements at Fish Camp County Park.
- Dane County is actively working on providing on road bike lanes on CTH AB and acquiring additional land to construct an off road trail from Fish Camp Park to the Village of McFarland.



FISH CAMP COUNTY PARK ACCESSIBLE FISHING/BOATING CONCEPT PLAN



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL DESIGN

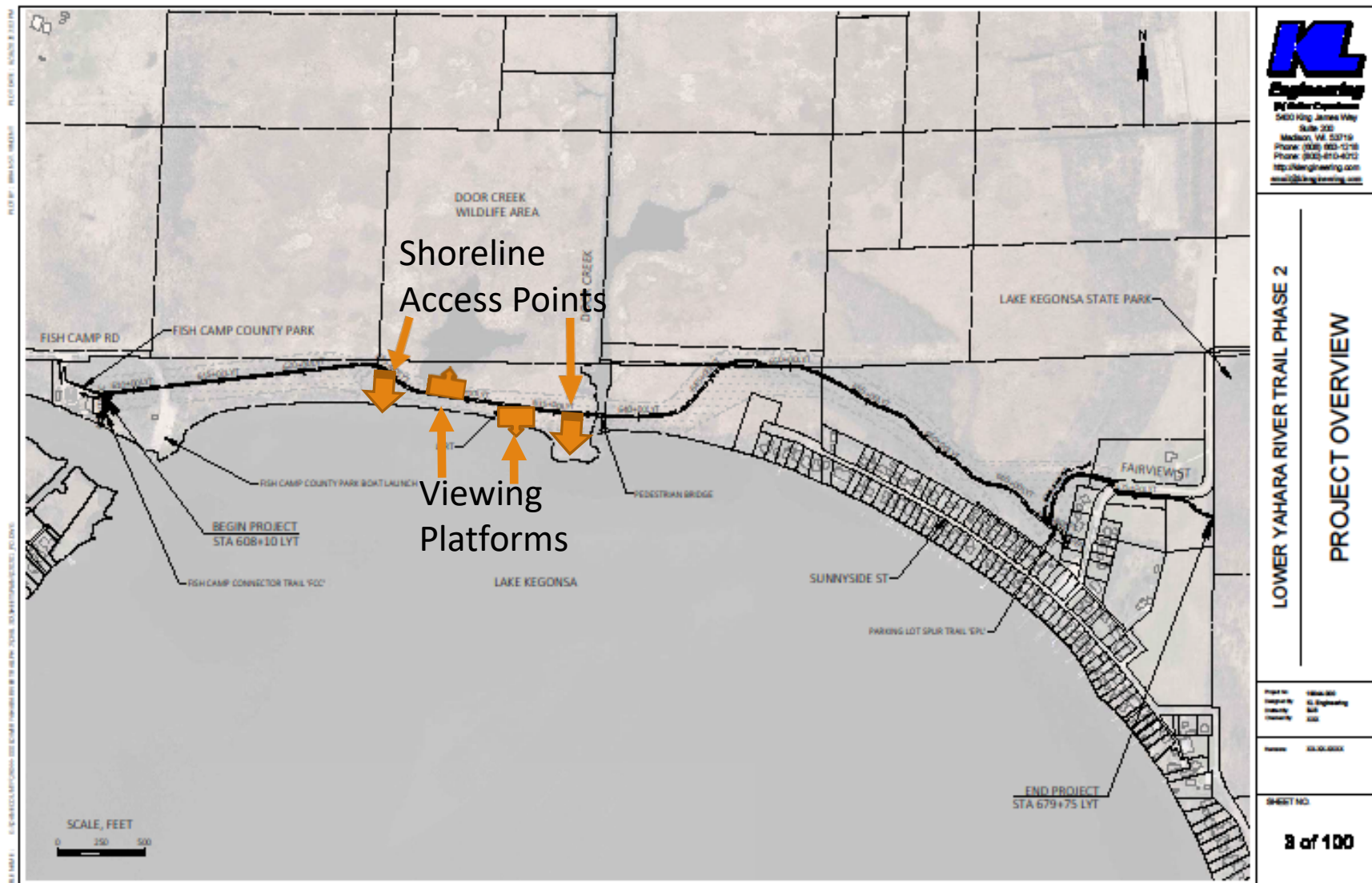
- Soil borings on the existing mown path between the Fish Camp County Park boat landing and Door Creek revealed the paved trail surface proposed on the original concept plan was not feasible due to settling concerns.
- This resulted in approximately 900' of additional proposed boardwalk.



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL AMENITIES-BUMPOUTS AND SHORE ACCESS

-Viewing platform bumpouts similar to what was constructed at the Yahara River crossing on phase 1 of the trail and opportunities to exit the boardwalk for shoreline/marsh access are being proposed.





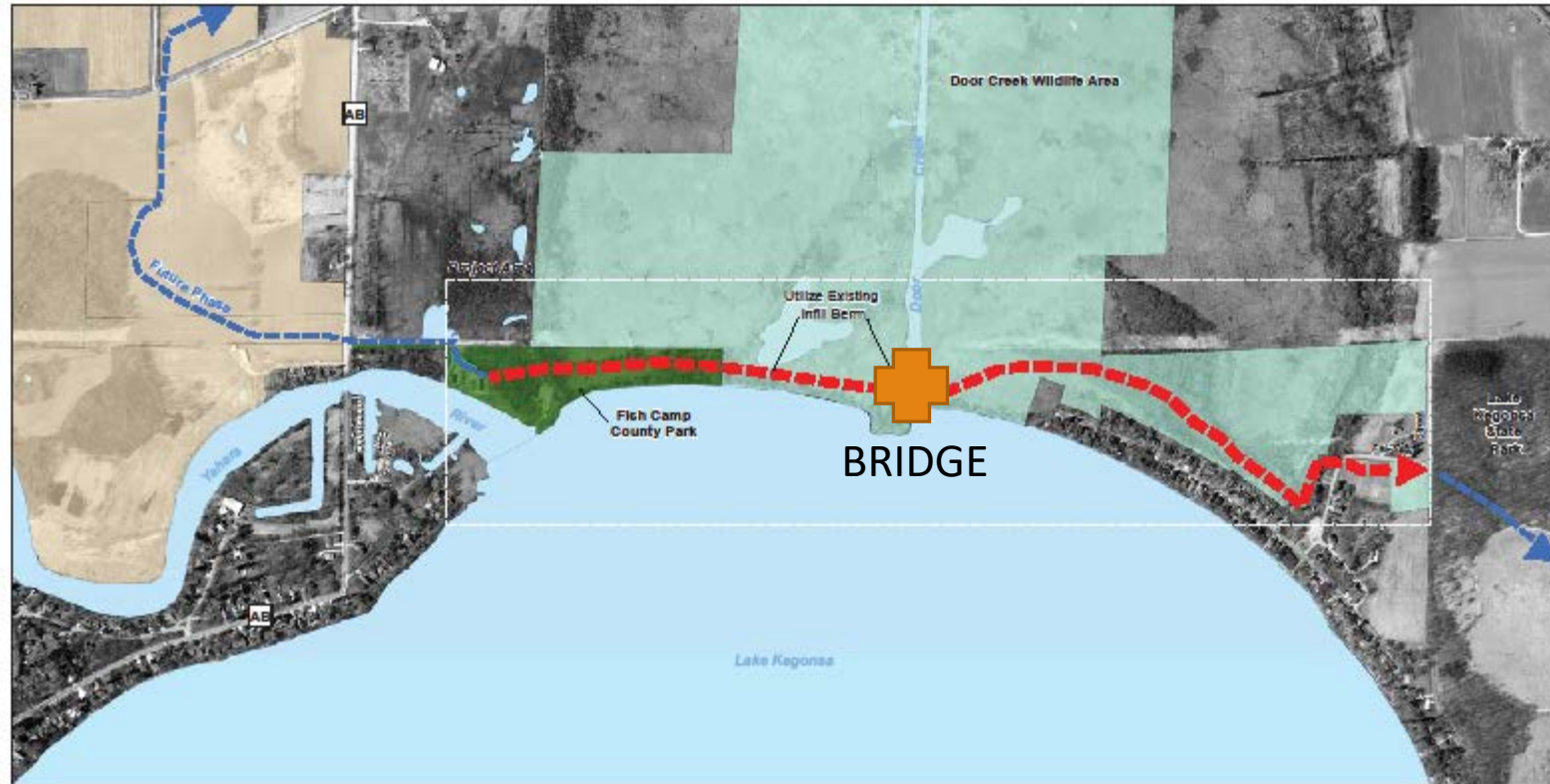
PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL AMENITIES-DOOR CREEK BRIDGE

- An approximate 90' clear span bridge similar to what was constructed at the Yahara River crossing on phase 1 of the trail is being proposed.
- The proposed bridge will allow passage of watercraft that are traveling up the creek.



PHASE 2 LOWER YAHARA RIVER TRAIL DOOR CREEK BRIDGE LOCATION

Lower Yahara River Trail Phase 2: Fish Camp County Park to Lake Kegonsa State Park Segment

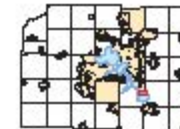
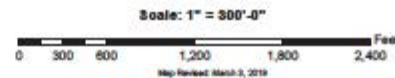


Legend

| | |
|--|----------------------|
| | County Wildlife Land |
| | County Park Land |
| | County Resource Area |

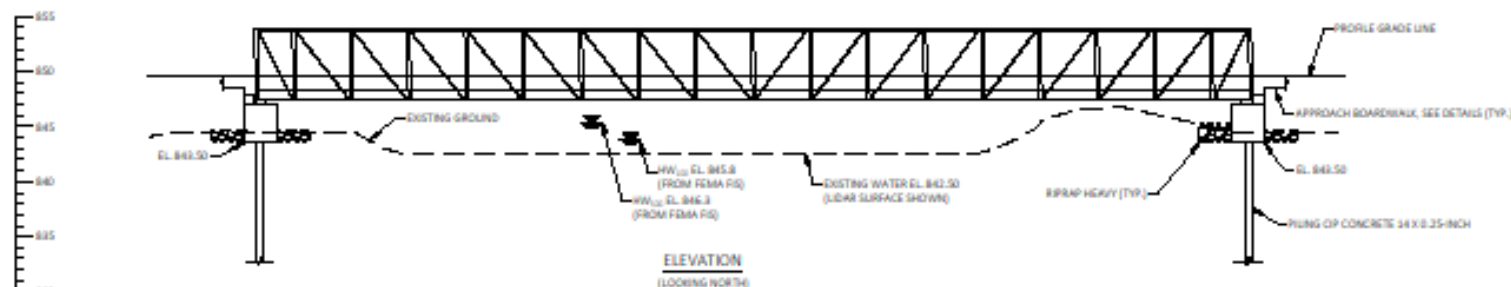
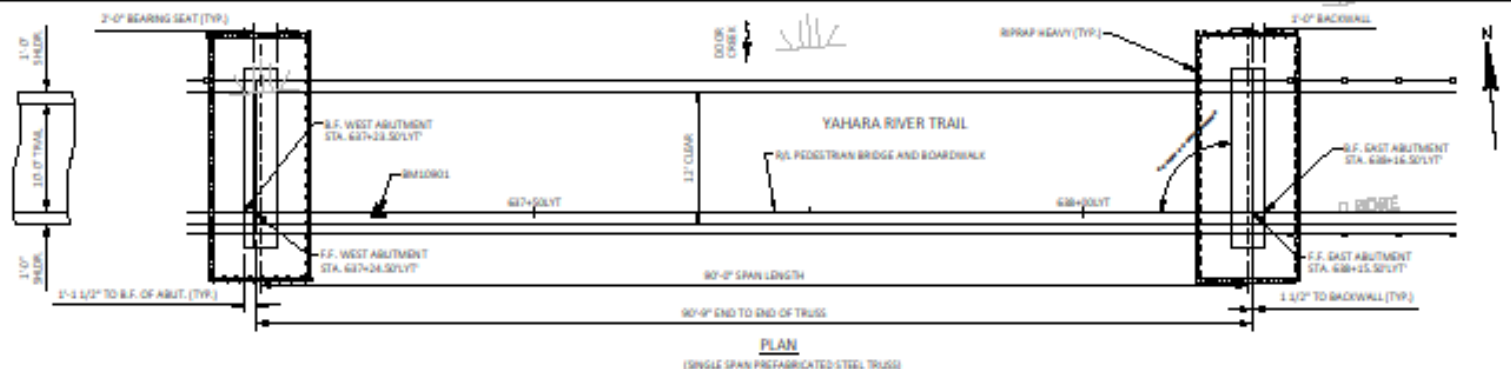
- Proposed Lower Yahara Trail: Phase 2
- Lower Yahara River Trail: Future Phase
- Proposed Bike/Pedestrian Bridge

EXHIBIT B: PROJECT AREA



Source: Dane County Parks, GIS data as of 10/1/2018. Map created by Dane County Parks, GIS, 10/1/2018.





DESIGN DATA

DESIGN SPECIFICATIONS:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES

LIVE LOAD:

VEHICLE DESIGN LOAD: H-5
PEDESTRIAN DESIGN LOAD: 90 PSF

ULTIMATE DESIGN STRESSES:

| | |
|---|--|
| CONCRETE MASONRY SUBSTRUCTURE | $f'_c = 3500$ PSI |
| STEEL REINFORCEMENT | |
| GRADE 60 | $f_y = 60,000$ PSI |
| GRADE 40 | $f_y = 40,000$ PSI |
| PREFABRICATED STEEL TRUSS | |
| H&I MEMBERS ASTM A992, GRADE 50 | $f_y = 50,000$ PSI |
| ROLLED SHAPES AND PLATES ASTM A588, GRADE 50 | $f_y = 50,000$ PSI |
| COMPOSITE DECK | 250 PSI ALLOWABLE (BENDING) 350 PSI ALLOWABLE (SHEAR) |

FOUNDATION DATA

ABUTMENTS AND PIERS TO BE SUPPORTED ON PILING CAP CONCRETE 14 X 0.35-INCH DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 65 TONS** PER PILE. AT ABUTMENTS AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED LENGTHS:

WEST ABUTMENT = 50'
EAST ABUTMENT = 50'

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.50 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA*

100 YEAR FREQUENCY:

$Q_{100} = 1625 \text{ C.F.S.}$
 $VEL. = 300 \text{ F.P.S.}$
 $HW_{100} = EL. 945.8$
 $WATERWAY AREA = 3000 \text{ SQ. FT.}$
 $DRAINAGE WAY AREA = 3000 \text{ SQ. MI.}$
 $SCOUR \text{ CRITICAL CODE} = 101$

10 YEAR FREQUENCY:


Q₁₀ = 507 C.F.S.
V_{EL} = 300 F.P.S.
H₁₀₀ = 61,000 X

*COORDINATION ONGOING WITH DANE COUNTY AND DNR REGARDING HYDRAULIC DATA. HW ELEVATIONS AND FLOW RATES ARE FROM FEMA FIS.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. CROSS SECTION, GENERAL NOTES & QUANTITIES
3. SURFACE EXPLORATION
4. PILE LAYOUT PLAN

CONTACT INFORMATION: CASEY@AMERICAN-RESEARCH.COM [800-868-1111](tel:800-868-1111)

| | | | |
|--|----------------|----------------|------|
| PCL | DATE | PROJECT | BY |
|  | | | |
| <p>PROPOSITION BRIDGE JWB BEAUMONT OVER BARGE DRAIN</p> | | | |
| PROJECT | DRAW | DATE/REV/SCALE | DATE |
| SCALE 1/8" = 1' | DATE/REV/SCALE | | |
| BY | CHECK | DATE | DATE |
| GENERAL PLAN & ELEVATION | | SHEET 3 OF 9 | |

KL
Engineering
A Miller Company
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enr@klengineering.com

LOWER YAHARA RIVER TRAIL PHASE 2

GENERAL PLAN
PREFABRICATED PEDESTRIAN BRIDGE

| | |
|-----------|----------------|
| Input to | Table 2(a) |
| Input by | EL Engineering |
| Issued by | ETD |
| Issued to | ETD |

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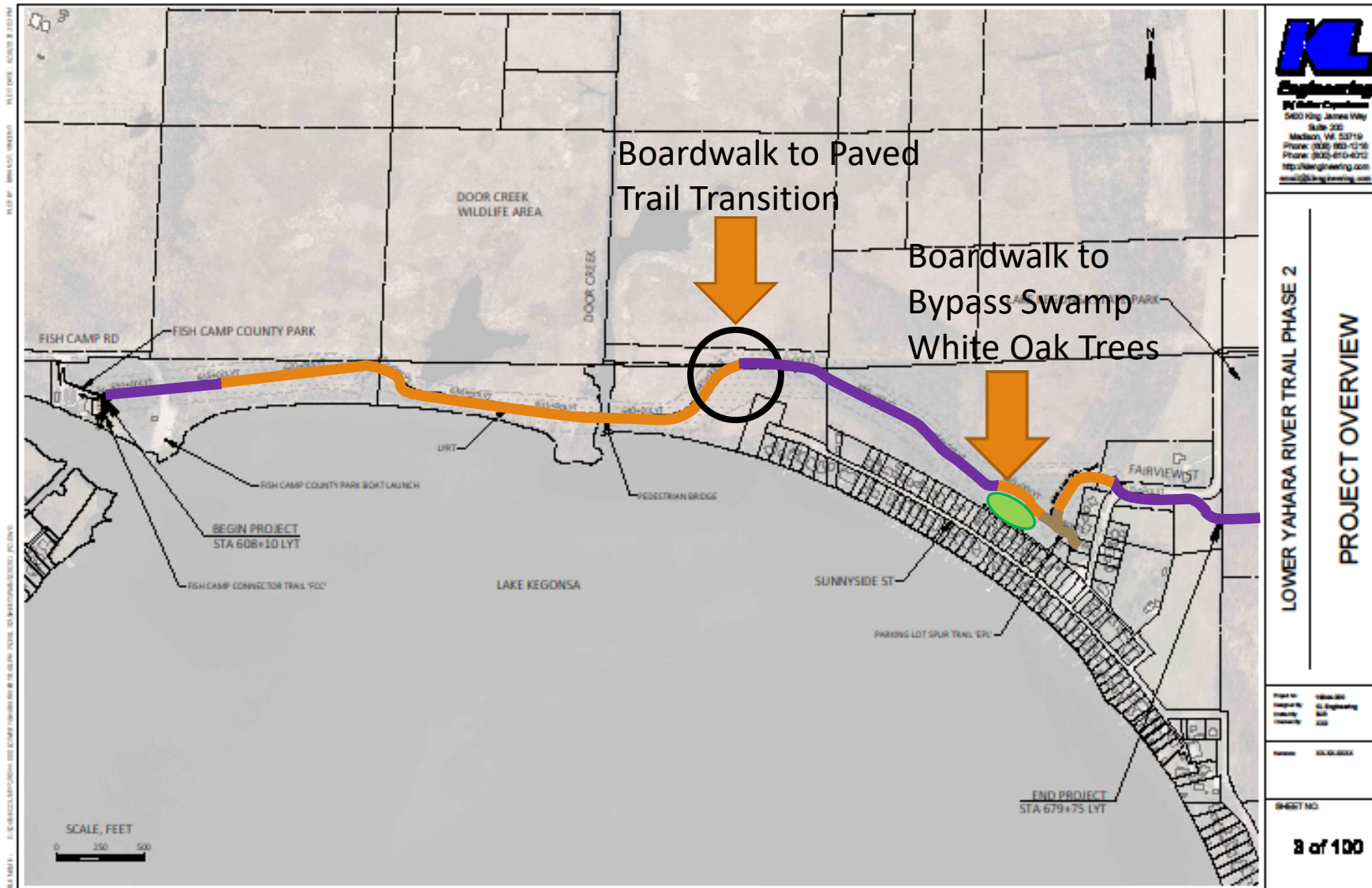
QUESTIONS

1 OF 4



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL DESIGN

- The proposed trail will transition from elevated boardwalk to an at grade paved surface near the ATC transmission lines at the west end of the existing natural surface path.
- The proposed paved trail will follow the existing natural surface path east to the Swamp White Oak grove where it will transition to a boardwalk to bypass the oak trees on the north side.



— 10' Wide Paved Asphalt Trail
 — 12' Wide Elevated Boardwalk

— 10' Wide Crushed Limestone Trail



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL DESIGN

- An at grade intersection of the existing snowmobile and proposed bicycle trail was designed to allow both trails access through the existing gate.
- The proposed bike trail to the gate would be 10' wide crushed limestone to accommodate snowmobile use.
- Vegetative screening and decorative split rail fence will buffer the trails from adjacent neighbors.

PHASE 2 LOWER YAHARA RIVER TRAIL

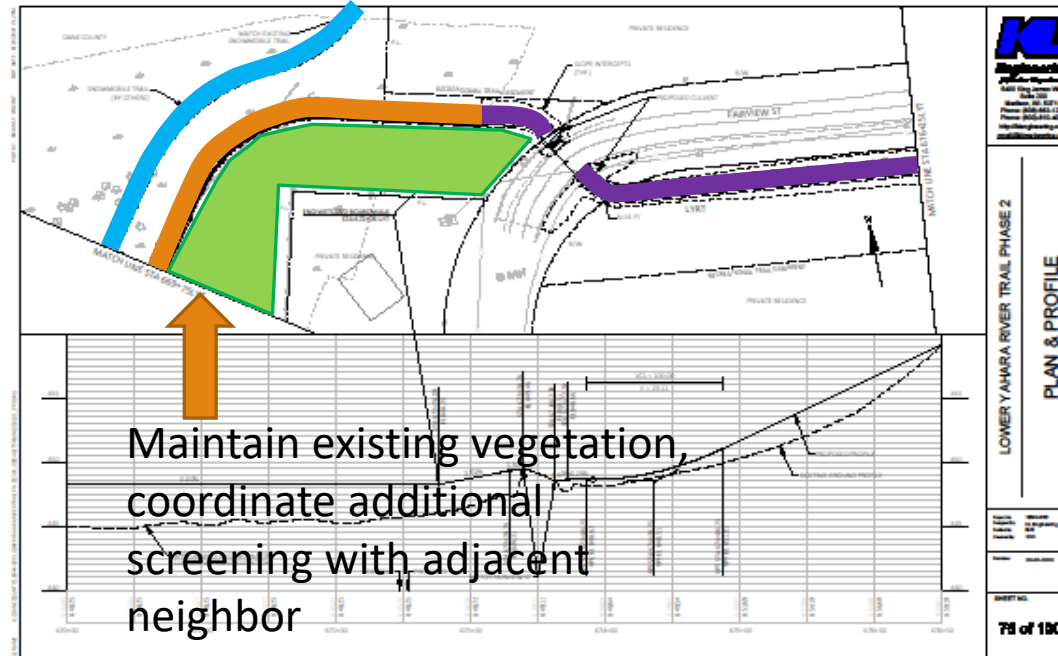
TRAIL AMENITIES-FAIRVIEW SPUR TRAIL PARKING LOT

- An approximate 14 stall parking area is proposed on Fairview Street that will provide off road vehicle parking for area residents to access the trail.
- Decorative split rail fencing, signage and buffer plantings will provide County park identity to the site. The parking area will not be lighted or accommodate trailer parking.
- This site will also likely be used for staging and construction access during development of the trail.



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL DESIGN

- The proposed snowmobile/bicycle trail was moved west of the existing snowmobile trail to avoid an area that frequently ponds and provide additional separation from adjacent neighbors.
- The proposed bicycle trail will cross Fairview Street and enter Lake Kegonsa State Park on the west side. Striping and signage will be added to the trail crossing on Fairview Street.



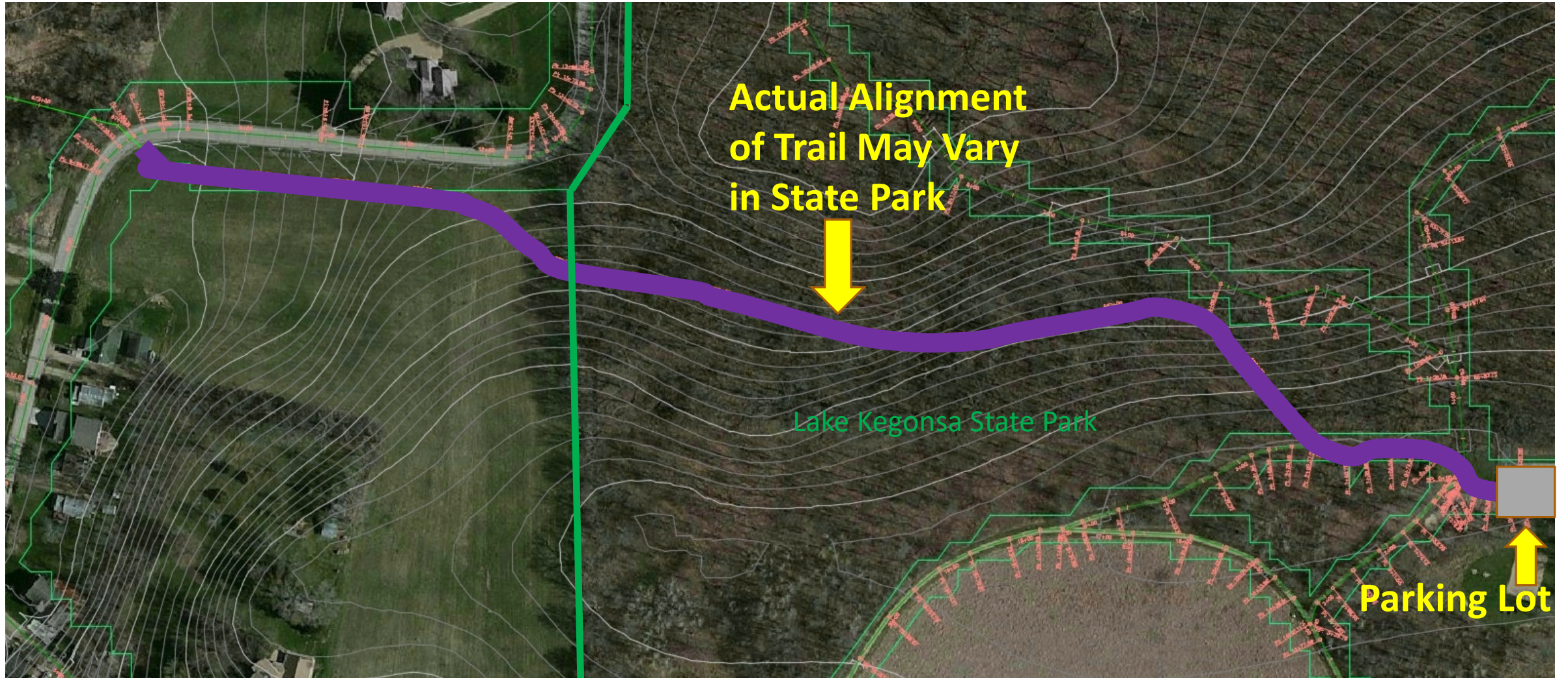
- 12' Wide Boardwalk
- 10' Wide Paved Trail
- Snowmobile Trail



PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL DESIGN

- The proposed bicycle trail will end in Lake Kegonsa State Park at a restroom/playground parking lot.
- Archaeological sites in the State Park were mapped and avoided by the proposed trail alignment.

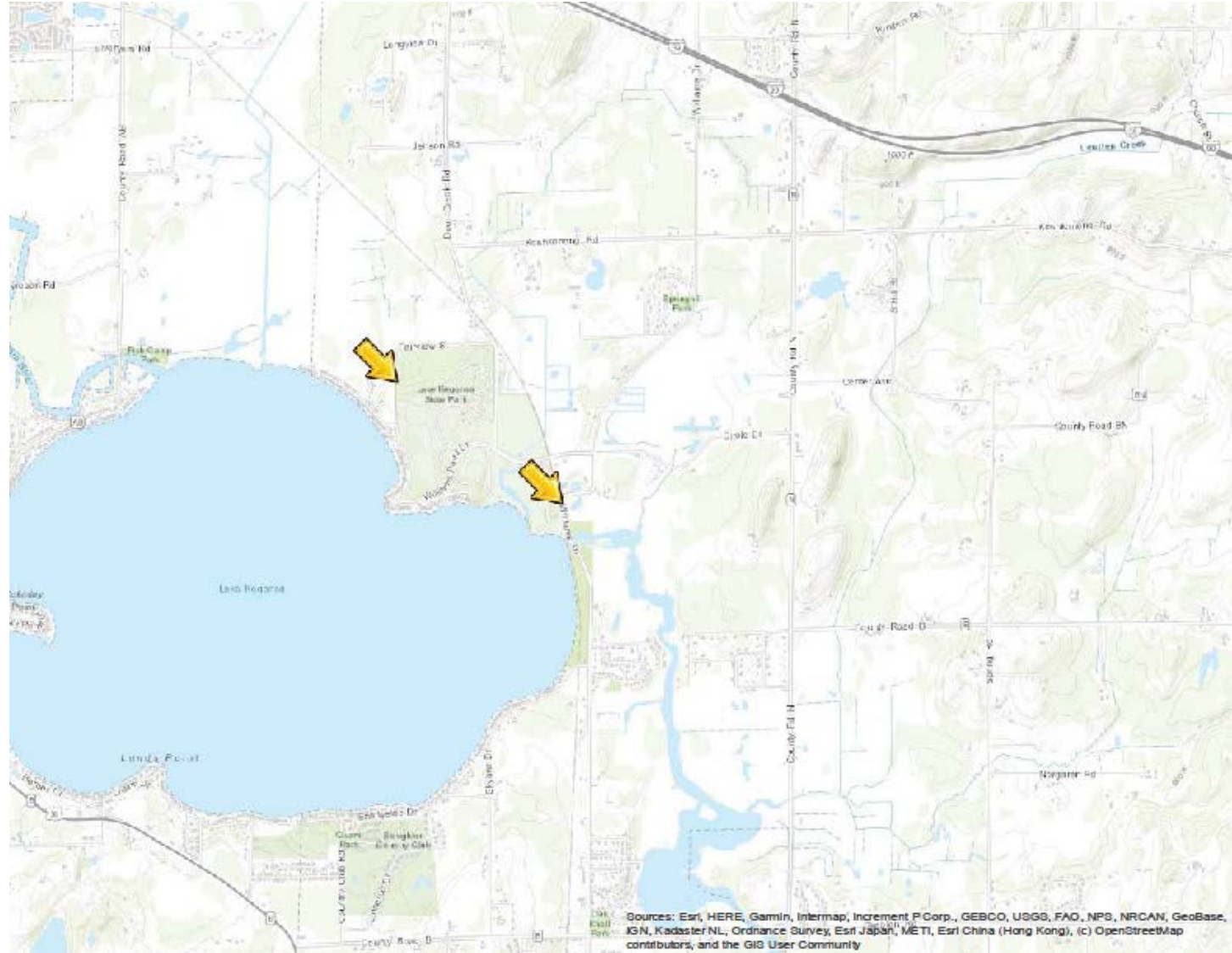




PHASE 2 LOWER YAHARA RIVER TRAIL TRAIL DESIGN

- The proposed bicycle trail will travel through the State Park on a combination of on road and off road paths to Williams Drive.
- Dane County Parks is actively working on acquiring additional lands needed to extend the trail from Lafollette County Park to the City of Stoughton.

PHASE 2 LOWER YAHARA RIVER TRAIL LAKE KEGONSA STATE PARK



PROJECT TIMELINE & NEXT STEPS

Oct. 2020-Feb. 2021-Agency Coordination/Permit Approvals

Oct. 2020-Feb. 2021-Finalize Construction Documents

Summer 2021-Bid Construction of Trail

Fall 2021-Begin Construction of Trail

Summer 2022-Trail Completion



For Questions, To Provide Feedback or Find Out More Information Contact :

Chris James, Senior Landscape Architect

Dane County Parks

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Madison, WI 53719

608-235-2252

james@countyofdane.com

Please Submit Your Questions/Comments By:

OCTOBER 31th, 2020

