SAN LUIS OBISPO COUNTY
BICYCLE ADVISORY COMMITTEE

Staff Report – August 13, 2019
County Government Center
1055 Monterey Street, Room 161
San Luis Obispo, CA 93401

Presentation – Bob Jones Trail (30% Plan development)

Wallace Group has been under contract to produce 65% construction documents for the full project length. Legal descriptions for the acquisitions is part of the current contract. Shaun Cooper of County Parks will provide an overview of the project and take questions on next steps in the project as well as strategies for future funding.

BAC Business items

I. US Bike Route 95 – Final Direction on Routing/Signage

The topic of US Bike Route(USBR) 95 route selection has been discussed at a number of previous BAC meetings. Discussion has revolved around the City route preference of travelling along Route 1 within the City Limits or traveling along Los Osos Valley Road; effectively bypassing the town. The City of San Luis Obispo has provided the attached letter indicating the route should go down Route 1 (Santa Rosa Avenue) with the gateway approach via Foothill Road in the County. Their letter expressed having entrance on Route 1 but as an alternative.

The alternative, from past discuss, involved USBR 95 traveling along:

A. Route 1 – South Bay Boulevard – Los Osos Valley Road -points south
B. Route 1 – South Bay Boulevard – Los Osos Valley Road – Foothill Road
C. Just continue on Route 1 through San Luis Obispo

Based on the City action, alternative A is removed. Alternative B would be the posted route. Alternative C could potentially be signed USBR (Alternative) if allowed under the program and funding would support.

SLOCOG staff has been working toward grant funding for wayfinding signs to support installation of a USBR 95 route. Staff will check on the exact form needed to indicate support of route from the County; either letter from our Board chair or a resolution.

Staff Recommendation: **Direct Committee Chair to send letter to Board of Supervisors endorsing the selected route for USBR 95. Staff will then take the necessary resolution to the Board of Supervisors for agency adoption. Notify Caltrans the result.**

II. Ontario Road at Johnson Ranch Open Space entrance

Parking along this stretch of Ontario Road has been haphazard since the beginning of the Open Space trail system. The parking typically occurs near the intersection of Higuera Street during peak weekend use. The City of San Luis Obispo has now constructed an internal parking lot for the open space which will greatly ease the amount of on-street parking. But with popularity of the site remaining high, this may just be a lull in parking demand.

Roadside condition controls ideally would be established this year while the opportunity to control street parking exists. These roadside control may include:

- Defining, and improving, the access driveway location from Johnson Ranch
- Stabilizing or limiting damage to the shoulder edge.
- Restricting parking near the intersection with signs/ordinance
- Restricting parking near intersection with physical barriers

The attached site aerial map shows the entrance and the rutting/pothole in the shoulder areas caused by vehicles entry or parking. Input from cyclists is requested to develop a strategy on keeping the area safe and well maintained.

Staff Recommendation: Request City obtain Encroachment Permit for a new paved driveway approach and physical barriers for parking near the intersection. Final Layout pending.

III. Use of Bollards on Trails

The subject of bollards placed on bike trails has been an area concern from previous Bicycle Advisory Council meetings. That bollards create unnecessary obstacles on the trail and that cyclist collision with the bollard have resulted in catastrophic injuries. The item today provides an opportunity to further discuss the use and practice of bollards and to provide direction to County to inform standards and adoption of policies.

The current AASHTO Guide for Bicycle Facilities states:

> *The routine use of bollards and other similar barriers to restrict motor vehicles is not recommended. Bollards should not be used unless there is a documented history of unauthorized intrusion by motor vehicles. Barriers such as bollards, fences, or other similar devices create permanent obstacles to path users. Bollards on pathways may be struck by bicyclists and other path users and can cause serious injury. Approaching riders may shield even a conspicuous bollard from a following rider's view until a point where the rider lacks sufficient time to react.*

Conversely, bollards can provide a measure of safety protection for trail users from errant vehicles mistakenly traveling the path. Or, in extreme situations, drivers with malicious intent. The County has routinely placed bollards fronting

Disabled Person parking spaces near facilities for the sole purpose of preventing vehicle strikes into the building. Likewise, the City of San Luis Obispo is proposing to install "pop-up" bollards on Higuera Street as a protection measure for the town's farmer's market. A steel post will stop a standard vehicle from encroaching onto the path.

Depending on the entrance of a trail, bollards may not present a complete obstacle for access onto a trail. Fencing or other constraints would need to be in lace to limit access in avoiding the bollard. This may create a need for a series of bollards at or near the trail entrance.

Can there be alternatives to placement of bollards for prevention of vehicle use of a trail? The AASHTO guide goes on to suggest:

> *A three-step approach may be used to prevent unauthorized motor vehicle entry to shared use paths:*
>
> *1. Post signs identifying the entry as a shared use path and regulatory signs prohibiting motor vehicle entry. For example the R5-3, "No Motor Vehicles" sign may be placed near where roads and shared use paths cross and at other path entry locations.*
> *2. Design the path entry location so that it does not look like a vehicle access and make intentional access by unauthorized users difficult. A preferred method of restricting entry of motor vehicles is to split the entry way into two sections separated by low landscaping. Each section should be split into two 5 foot (1.5m) sections. Emergency vehicles can still enter, if needed, by straddling the landscaping. Alternatively, it may be more appropriate to designate emergency vehicle access via protected access drives that can be secured. The approach to the split should be delineated with solid line pavement markings to guide the path user around the split.*
> *3. Assess whether signing and path entry design prevents or reduces unauthorized traffic to tolerable levels. If motor vehicles incursion is isolated to a specific location, consider targeted surveillance and enforcement. If unauthorized use persists, assess whether the problems posed by unauthorized vehicle entry exceed the risks and access issues posed by the barriers. Where the need for bollards or other vertical barriers in the pathway can be justified despite their risks and access issues, measures should be taken to make them as compatible as possible with the needs of bicyclists and other path users.*

Based on the content of the AASHTO guide and through a study performed by Parsons Brinckerhoff in 2013, the City of Albuquerque adopted a best practices for use of bollards on their trails as follows:

- *Only apply bollards if the need is demonstrated, or if the trail entrance cannot be designed or modified to discourage use by unauthorized motor vehicles. Bollard use should be reserved for problematic locations.*
    - *Bollards should not be installed on trail facilities that parallel a roadway unless it is identified as a problematic location.*
    - *Bollards should be considered along obscured facilities that are not readily visible and at problematic locations.*

- *All bollards should be made of a retro-reflectorized material or have retro-reflectorized tape affixed to them for easy visibility from both approaches to the bollard.*
    - *Where possible, retractable bollards should be implemented. Appropriate usage ensures that the bollards will remain in place and cannot be removed from the site and when retracted, the bollard will not be a hazard.*
- *Bollards should be 40 inches in height (minimum) and 4 inches (minimum) in diameter to ensure visibility.*
- *In most instances, a single bollard should be placed at the centerline of the trail, where adequate sight distance is available.*
    - *Two bollards should not be used as they typically will be placed in the center of the travel way for each travel direction.*
    - *If it is necessary to restrict access adjacent to the multi-use trail to restrict motorized traffic, bollards should be placed a minimum of 2 feet off the edge of the trail.*
- *A minimum clear width of 5 feet should be provided between the edge of the trail and the bollard.*
- *A striped envelope (4 inch, retroreflective yellow) should be striped around the bollard to provide guidance to divert users around the bollard. A striped yellow centerline should also be provided along the trail for 25 feet on either side of the bollard.*
- *Bollards should be set back 30 feet from the roadway to separate the conflict point for users between the roadway and bollards, or as far back as is practical based on site conditions.*

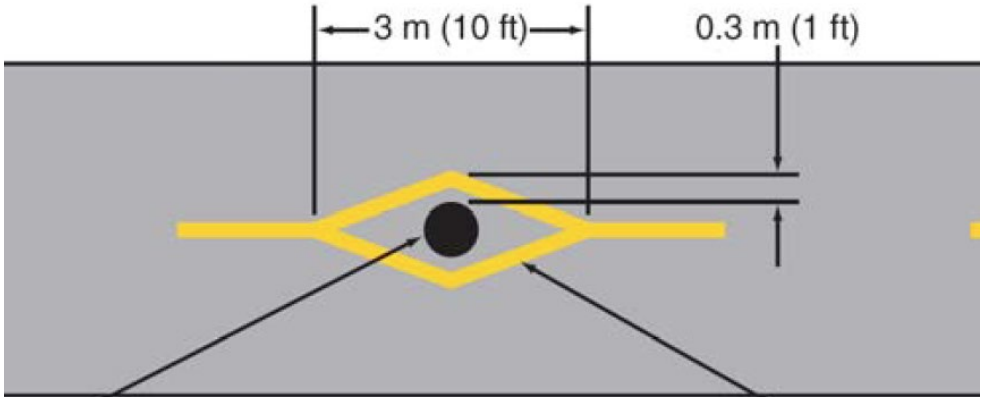
The full city of Albuquerque study is available at:
https://www.cabq.gov/planning/documents/AppendixCBollardStudy.pdf
The California Highway Design Manual, Chapter 1000 Bicycle Transportation Design Topic 1003 – Bikeway Design Criteria element (17) Entry Control for Bicycle Paths provides overall guidance of :

> *Obstacles such as posts or gates may be considered only when other measures have failed to stop unauthorized motor vehicle entry. Also, these obstacles may be considered only where safety and other issues posed by actual unauthorized vehicle entry are more serious than the safety and access issues posed to bicyclists, pedestrians and other authorized users by the obstacles.*

The manual proceeds to list the three step approach cited in the aforementioned AASHTO reference. Advises that these elements ,if installed, yield to (collapse) users to reduce injury, avoid non flush features to the trail and be reflectorized for night time use. A five foot minimum clearance is recommended between bollard and edge of paved path. Side bollards should be minimum two feet off the path edge. The manual goes on to note:

> *Fold down obstacle posts or fold down bollards shall not be used within the paved area of bicycle paths. They are often left in the folded down position, which presents a crash hazard to bicyclists and pedestrians.*

The California Edition of the Manual of Uniform Traffic Control Devices, Part 9 for Bicycle Facilities only demotes the necessary striping requirements around an obstacle such as a bollard. The layout is under Section 9C.101(CA):



The NACTO Urban Bikeways Design Guide does not address use of bollards.

For existing County bike Class I facilities, bollards exist at the entrance to Bob Jones Trail and the El Moro Bike path. They have been placed at the entrance to trail bridges, to restrict vehicle use of the structures, at locations such as the Old Creek bike trail bridge in Cayucos, the Las Pilitas Road bridge near Parkhill, and the recently constructed San Juan Creek pedestrian bridge in Shandon.

While some locations may/will ultimately require bollards to control conflicts, there should be alternatives which can be pursued first and foremost in the trail design.

Staff Recommendation: Use best practice guidance as stated in the AASHTO Manual of a three step approach to address entry conflict issues as the develop.

IV. Status of Bike Projects –

i. Los Berros Road (Pomeroy Road to Quailwood) – Project is in design for construction in 2020 to add six foot shoulders for this portion of the roadway. The work is funded under a Federal Highway Safety Improvement Program and Road Impact Fees for Nipomo.

ii. Los Berros Road (Quailwood to Route 101) - County pavement management program will overlay this segment of Los Berros Road in 2022. Plans have been developed to construct a left turn lane within this segment at Dale Avenue. Project has been expanded to create uniform shoulders (bike lanes) from Quailwood to the Route 101 interchange. Funding is from SB1 and Road Impact fees for Nipomo.

iii. Twenty Second Street (Route1 to Paso Robles Street, Oceano) – Project is in design for construction in 2020 as part of street overlay project funded under SB1 revenues.

iv. Atascadero-Templeton Connector – Environmental documents are being revised to show new alignment between Route 101 and the railroad as the cost effective route. $ 5.3M funding secured in ATP and STIP funds would construction the cost effective route in 2022.

v. Bob Jones Trail - 30 % Design plans developed by Wallace Group. Determining easements needs and hydraulic impacts to creek flows from the two proposed bridge crossing. Additional funding for completion of 100% construction documents is expected to be programmed by SLOCOG in January 2020.

vi. Morro Bay-Cayucos Connector -Further work is dependent on property acquisition from Chevron and Caltrans approval for use of portion of their right of way. Final design plans are yet to be concluded. No funding for the construction phase is identified.

V. Future Agenda Items.

1. Buckley Road Corridor Planning
2. Adoption of Meeting Schedule for 2020 Calendar year

Public Works
919 Palm Street, San Luis Obispo, CA 93401-3218
805.781.7200
slocity.org

April 2, 2019

Audrey Ogden, Transportation Planner
California Department of Transportation, District 5
50 Higuera Street
San Luis Obispo, CA 93401

Audrey,

As the AASHTO-designated lead organization of the United States Bicycle Route designation process for routes in California, we are writing this letter to your agency to provide support for a route alignment of Route 95 through the City of San Luis Obispo.

Please see the attached map detailing a route that highlights the City's unique attractions such as the downtown, the historic Mission San Luis Obispo de Tolosa, and conveniences that may be of interest to visitors on bike. This route was selected with helpful input from the City's Active Transportation Committee.

A point should be highlighted about the northern entry route to the City. As marked on the map, entry to the City via Foothill Boulevard is preferred, however, entry via State Route 1 (Santa Rosa Street) is also an option. Both points of entry have been marked on the map to provide input to you and partner agencies on their portions of the route.

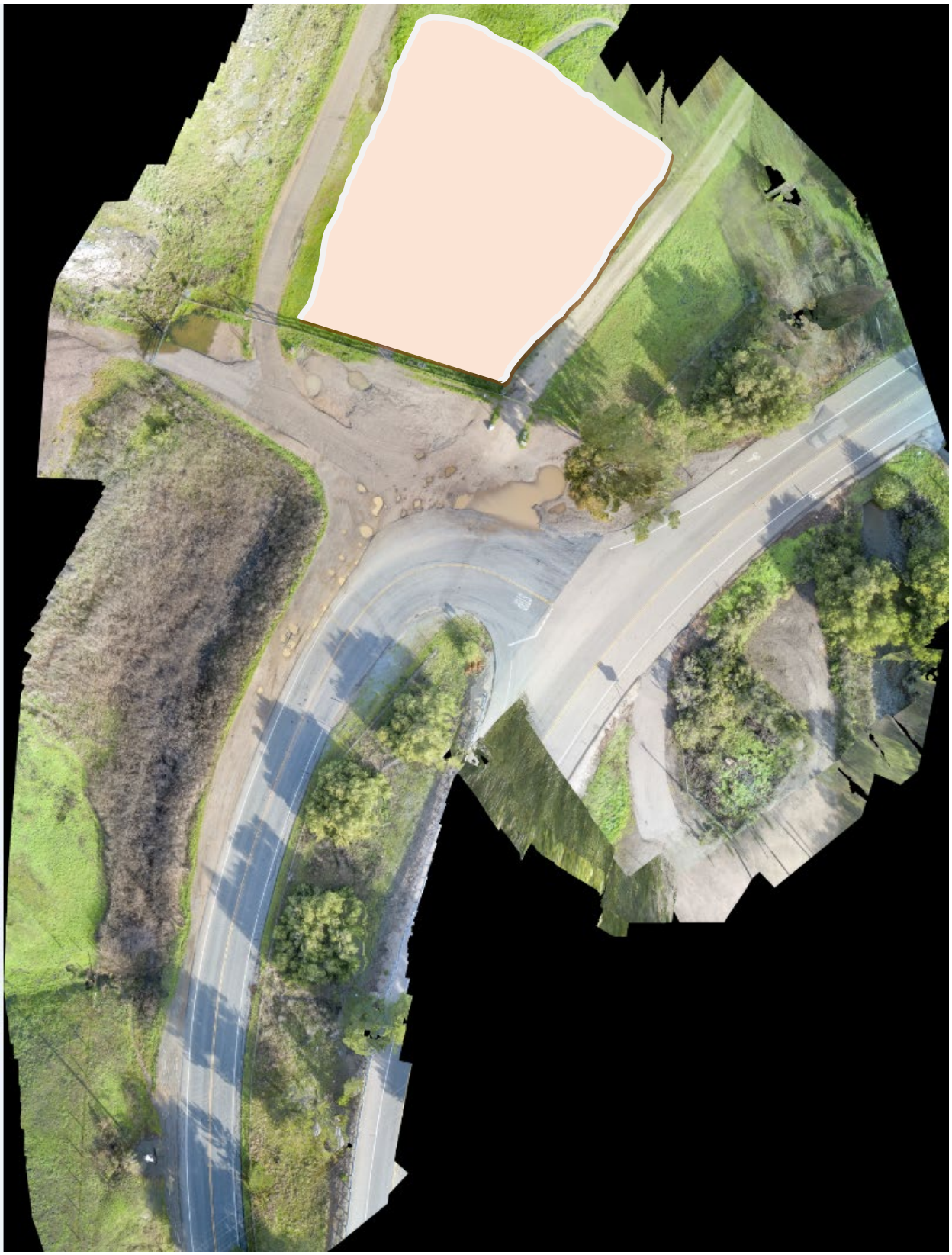
The United States Bicycle Route 95 is a challenging route highlighting the scenic and historic attractions of the Pacific Coast. As with all transportation routes, bicyclists should exercise care in choosing for themselves which route is most suitable for their skill and comfort level given current bicycling conditions.

If you have questions or concerns, please feel free to contact Adam Fukushima, Active Transportation Manager at afukushima@slocity.org or (805) 781-7590.

Sincerely,

Daryl Grigsby
Director of Public Works
City of San Luis Obispo

Attachment 1: USBRS Route 95 Map in San Luis Obispo City



<u>Ontario Road at Johnson Ranch Open Space; South Higuera Street intersection</u>
(New Parking area)

a) Johnson Ranch entrance looking east

b) Johnson Ranch entrance looking east

c) Johnson Ranch approach