



January 23, 2007

John Milne, Assistant Engineer, TOML
PO Box 1609
Mammoth Lakes, CA 93546
Subject: Lake Mary Road Bike Path plans

Dear John:

Thank you once again for meeting with John Wentworth and myself on January 5, 2007, to discuss the status of the construction plans for the Lake Mary Road Bike Path. We understand that the bidding process for this project is slated to begin shortly, and that the final bid set of plans are due by the beginning of February, and so we appreciate your willingness to entertain suggestions from our organization, MLTPA, in the context of the project's intense timeline.

In an effort to provide suggestions on the plans as they currently stand, MLTPA has enlisted Jeff Olson, Principal, Alta Planning + Design, to review the plans from an engineering and design standpoint, as neither John nor I have the training to conduct such a review on our own. His comments appear as an attachment to this letter; it is our hope that they are reviewed by the Town in the spirit of constructive dialogue, as it is not at all our intention to impede the progress of this project. We would like to provide input so as to assist the Town and any future contractors in ensuring that this project best serves the needs of our community.



Please do not hesitate to call or e-mail John or me at any time with questions or comments about this document. Again, we appreciate your willingness to listen to our ideas, and hope to continue in this manner whenever appropriate, given the scope and deadlines associated with the Lake Mary Road Bike Path.

Thank you,

Kim Stravers
Executive Director
MLTPA

cc:

Rob Clark, Town Manager
Mammoth Lakes Town Council
Mammoth Lakes Planning Commission
Mammoth Lakes Tourism and Recreation Commission
Mammoth Lakes Public Arts Commission
Transportation Advisory Group (TAG)
Danna Stroud, Director, TOML Tourism and Recreation Department
Ray Jarvis, Public Works Director, TOML
Peter Bernasconi, Senior Associate Civil Engineer, TOML
Jeff Olson, Principal, Alta Planning + Design

**Lake Mary Road Bike Path
Comments on Draft Design Documents**

J. Olson, Alta Planning + Design

January 17, 2007

These comments were requested by MLTPA to be used in discussions regarding the ongoing Lake Mary Road Bike Path project. The project is already in final design, so major changes in the alignment are not likely to be possible at this time. These comments are being provided for informational purposes at the request of MLTPA. Our comments are based on a preliminary set of plans [received by the Town of Mammoth Lakes 10/26/06 and published by Triad Engineering], and we have not conducted a field review of the project. Alta Planning + Design accepts no responsibility or professional liability for the proposed design or our review of the draft plans. Our intent is to be constructive and not critical, and to provide information that is useful for the growing trails and public-access effort in Mammoth Lakes. We realize the challenge of aligning a trail in this landscape and the great effort put into finding a suitable solution.

Potential suggestions to be considered include:

Multiple Use: This facility is referred to as “Lake Mary Road Bike Lanes” and is also called a “trail” and a “bikeway.” It appears to be a shared-use path that will include walking, bicycling, running, and other trail users. The safety concerns and operational issues of multiple uses are important design and management considerations.

8' Cross Section: This is a minimum under AAHTO guidelines, and the facility should be posted with “share the trail” signage to minimize passing conflicts between pedestrians, runners, and bicyclists. The 8' bikeway cross-section is very narrow for a curving trail with these slopes. The likelihood of mixed non-motorized traffic (pedestrians, bikes, skaters, runners, etc.) compounds the safety issue. One potential solution might be to provide a wider soft shoulder on one or both sides of the paved trail tread. This would give runners and equestrians a softer surface, and provide wider berth at passing. The 10' section shown for the very steep segments (10–12% slope) is better, but this is still narrow for the slope and curvature. Wider shoulders could be included at the outside of these curves and special care taken to reduce fixed hazards such as trees and boulders.

Neighborhood Access: Areas of access to and from the trail will be important for people who want to use the trail, as well as for maintenance and safety access. Access points may need short sections of “connector” trails, safe crossings to the

main trail, and signage for approaching motorists. These areas may not all be identified in the draft plans; specific locations can be identified in the field and improved after the bidding process.

Asphalt Cost: The price of asphalt is linked to the price of petroleum, and costs have gone up significantly in the past year. This may affect the overall cost of the project.

Year-Round Use: If the longer sections outside of town are intended for bike/pedestrian use in winter, snow removal from both road and trail will have to be coordinated. This may be an issue in areas where the trail is lower than the road (snow may get plowed off the road and onto the trail). If the trail will be used for cross-country skiing, it will need to be posted and groomed.

ADA Compliance: If there are locations where grades don't meet ADA standards, these sections should be posted with signage and identified at trailheads and on trail maps. Where curb ramps are located along the bikeway, they should be in line with the travel path of bicyclist, not skewed at an angle to the path.

Trail/Roadway Crossings: At locations where the bikeway crosses roads and driveways, a signage and pavement marking plan should include MUTCD compliant details to ensure that pedestrians, bicyclists, and motorists safely use the facility.

Signage and Amenities: At a minimum, signage should identify cross streets, distance to destinations, and user safety information. Benches, trash receptacles, trailheads, kiosks, and other features are also part of many trail projects.

Cross Sections on Sheet X-1

- **Retaining walls** greater than 32" height (and side-slopes exceeding 3:1) may require a 42" safety railing—see local/state building codes. Railings should be located outside of the 2' shoulder.
- **The trail adjacent to and below the roadway** may collect road debris on the edge nearest the road. A shoulder between the in-slope and trail could help reduce debris on the trail.
- **Trail cross-sections adjacent to roadway** would ideally have a barrier between the roadway and trail. Minimally, there should be flexible lane delineators at the edge of the roadway pavement, and no closer than 2' from edge of trail pavement.

NOTES: Page G-3

- **7. Existing Utilities to Remain.** Adjust covers—covers and frames within trail and shoulder surface to be flush with finished trail surface —+/- no more than 1/4".
- **9.** Bridges should be same CLEAR width as trail (tread and shoulders)—12'. Bridges shown are 10' to OUTSIDE of railings, leaving 8' clear between obstructions (railings). The short spans (P-7 and P-8) are in curves and could be wider. Trex and similar artificial wood are not suitable structurally for railing applications—the material deforms without continuous support.
- **17. Log Barrier Guardrail.** 5' seems high for a guardrail with no additional protection below if this is protection for trail users from a drop-off (sta 323+50 to 327+75).
- **40.** 2-1/2" AC seems thin over 4" Class 2 aggr. This will not likely stand up to freeze/thaw, tree roots, and maintenance vehicles.
- **Sheet D-1 Tunnel.** This is a steep tunnel (14' in 214' = 6.5%). Special care should be taken with alignment at both ends to help users avoid collisions. The fencing and steep slopes will push users toward the middle of the trail and the curves reduce visibility. Make sure trail drains before entering tunnel. Water on the surface could freeze and stay frozen out of the sun.
- **D-2 Boardwalk.** CLEAR width (from inside of railing) should be 10' minimum.
- CLEAR passage around utility pole in middle of walkway should be minimum 6' between utility pole and railing, and 8' between utility pole and unprotected (uphill) edge. This detail can not be built with deck 1' above grade as specified. Closest (using joist hangers between the cross beams) is 18" WITHOUT the diagonal bracing.