2019-07-19 James A. Mason, Ph.D., P.E. 21 Domingo Road Santa Fe, NM 87508

The following list presents general goals, activities and actions of the road committee that I envision as beneficial and helpful to the Eldorado community. Note that I present this list for the years 2020-2024. I estimate that these activities will easily take two to four years for execution. In addition, I have not yet assigned costs to some of these activities, but will address potential costs issues for the particular goals, as discussed below.

GOALS for the ECIA ROAD COMMITTEE - 2020-2024.

 Correlation of poor road performance with slope of road, soil type, and local drainage features.

Extensive efforts have been expended by former committee members in terms of documentation of observed poor road features. These features were investigated because of estimated potential of exacerbating existing road and/or property damage due to either natural or manmade causes. These records should be analyzed by several methods to extract predictive trends to focus ECIA effort and monies on these assets. With data of this sort, it should also be easier to coordinate with Santa Fe County officials about infrastructure needs in our community.

These methods are listed below.

- Develop correlation of poor road performance, both on a large and local scale, based on the slope of the road, soil type, and local drainage features. Slope of the road segments can be plotted with Google Earth Pro, with notes and photographs of culverts and ditches attached. Then, a time history record is developed with damage correlation to specific storm events. Soil types can be assessed from both on-line and in-situ soil samples. Local drainage issues will be culled from prior surveys by the ECIA Road Committee. Several websites are presented below:
 - USDA Resources Conservation Service Natural Soils https://www.nrcs.usda.gov,
 - o https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
 - o https://en.wikipedia.org/wiki/Soil survey
- Plot critical issues and features on Google Earth Map to visualize data.

2. Air sampling of various Road Types.

The issue of airborne pollutants needs to be assessed for the roads of Eldorado. Only by scientific analysis can these issues be assessed and moved away from opinion proclamations and moved to rational discussion. The general road types that need to be sampled and monitored are: 1) existing compacted soils, 2) paved, 3) RAP, and 4) Verano Loop road base.

The basic costs of the required services and associated agencies is unknown at this time.

3. Drainage Basin Development as part of Rainwater Runoff Capture.

There are several unique locations in Eldorado where rainwater runoff can be directed onto ECIA properties with the potential of creating and/or enhancing local native habitat. This type of project would require the joint effort of several committees to create and seed areas with native plants, with expected minimal maintenance. This is an opportunity to put into practice methods that were highlighted in the recent workshop held at the ECIA buildings: The Garden Fair. And in particular, to have Jan William Jansens with the Ecotone Landscape Planning company work directly with the Conservation, Environmental, and Road committees.

4. Community Training about Culverts and Ditches and Assessment of Ground Surface Rainwater Run-off.

The intent of this training is to help our neighbors be able to assess the condition of their culverts and drainage ditches adjacent to their property for basic performance and structural condition. The second part of the training is to help people be able to visualize and map ground water movement on their properties. This could be coordinated as a local neighborhood event where neighbors could help each other.

Develop new working relationship with new Director of Santa Fe County Roads Division.
This obviously needs to occur.