

Response to Ray Albright, Jim Egan and Marc Rowe

ROAD STUDY GROUP (RSG) COMMENTS/REPLY

We respond briefly below to the most significant issues raised by your March 8 letter (copy below, after the RSG response).

Need for specificity

The RSG believes that the design and related costs of the roadway improvements under consideration are sufficiently developed for an informed vote by the membership. Preliminary engineer layouts have been prepared, made available at public town hall meetings and discussed with applicable regulatory authorities. Those layouts, together with discussions with regulators provide sufficient detail to prepare conservative cost estimates. The bulk of the paving alternative costs is building the road base and application of asphalt. Those costs are driven by square yards of material and workmanship. Our current price per yard has been confirmed in writing by PMI. We have also accounted for the cost of staking out the road footprint, merging with existing driveways and supporting roadway edges. While definitive engineering for infiltration features will not be commissioned unless and until paving is approved by a majority of the members, the nature (described in the RSG town hall presentations) and location (i.e., on Association property) has been discussed favorably with regulators. As to the timing of regulatory approvals, no road upgrade will be undertaken without receipt of the requisite permits. Trying to obtain these approvals without the prior approval of an upgrade by the membership may not be practicable and, in any event, would involve the expenditure of additional funds without the assurance that the community wants to move forward with the upgrade in question.

The suggestion that members will be asked to vote on a project without any assurance of costs is misplaced. Any vote will specify the maximum amount of the assessment. Just as any upgrade project will not proceed absent the requisite permits, it will not be undertaken if the costs, based on final engineering, are projected to exceed the aggregate amount of any member-approved assessment.

As to the question of future costs of maintenance and related dedicated reserves, the RSG presentation disclosed projected costs in 2017 and suggested that the community could opt to fund those amounts by accruing reserves. Florida law does not, contrary to the suggestion in your letter, mandate the accrual of reserves for the renewal of capital improvements or deferred maintenance. Rather, it specifies how such reserves should be accounted for if and when a community votes to accrue and assess for such reserves.

The future costs presented by the RSG were intended as a general and conservative response to the question of life cycle and potential grinding and re layering of the roadways. In actuality, of course, one needs a road in place to properly evaluate and reserve. If improvements are ap-

proved by the membership, our plans call for such an evaluation to be done by Velocity Engineering Services, which performs evaluations and reserve calculations for a variety of local communities. The RSG is also mindful that there are alternative, lower cost maintenance regimes (i.e., surface rejuvenation), that are a fraction of the cost of re layering. These alternatives may substantially extend the life of a surface.

Accordingly, the RSG believes that the question of whether or not to establish reserves for any capital improvements to the CSM roadways is best deferred until a decision is made by the membership whether to undertake any such improvements. Rest assured that, if any such improvements are authorized and the membership votes to establish reserves for capital improvements and/or deferred maintenance, the amount of those reserves will be determined in accordance with Florida law.

Road Integrity

Your letter raises numerous questions with respect to road integrity, none of which is new and all of which were considered by the RSG and its consulting engineer in preparing the RSG report. While the RSG recognizes that reasonable experts may disagree on matters, the RSG made an effort to consult multiple sources with extensive roadway paving experience on Sanibel and commissioned load bearing studies to determine the load bearing capacity of our roadways. The RSG brought its engineer and road builder PMI to its town hall meeting to be available for member questions and address these issues. The RSG is also mindful that, notwithstanding its efforts to minimize expenditures, its investigation of these issues has come at a substantial cost.

In addition to the results of the RSG's study of our own roadways, the RSG is mindful that CSM does not exist in a vacuum. It is surrounded by similarly paved communities that have weathered severe flooding without major roadway failure. While that alone was not sufficient to lead the RSG to conclude that no investigation of our roadways was needed, it does argue for applying reasonable boundaries to the scope of investigation.

In light of the foregoing, the RSG does not believe that the scope and nature of the proposed improvements warrants further expenditure of community funds.

City Permit Issues

The RSG and Board are currently in dialog with the City of Sanibel as to what, if any, approvals it will require in order for any capital improvement to be made in the CSM roadways. The City has acknowledged that, to date, it has not required permits or other approvals where private community roadway improvements have been undertaken.

Needless to say, any improvement project will seek to comply with applicable law. The permitting agencies have expressed a preference that we have a community consensus before engaging in the permitting process.

Road Safety

The RSG appreciates that safety is a legitimate concern to all Sanibel residents, including those in CSM. The RSG has acknowledged that paving CSM's roadways may encourage higher rates of speed. For that reason, the RSG investigated and confirmed the practicability of retrofitting improved roadways with speed hump/bumps and/or signage, if they prove needed. At the same time, the RSG recognized that most of Sanibel's roadways are paved and almost none have experienced the need to install speed humps/bumps. Moreover, almost no reported incidents of vehicle accidents with pedestrians or bicycles have occurred within residential communities (paved or unpaved). Accordingly, it appeared reasonable to the RSG to make any decision with respect to speed bumps/humps based upon speeds actually experienced if and when roadway improvements are authorized and installed.

Construction Oversight

The RSG's budget for capital improvements will include funds for engineering oversight.

Here is the March 8 inquiry from Ray, Jim and Marc

March 8, 2016

To Board of CSM and Road Study Group:

We understand that some association representatives believe we strayed outside the process by sending an email to all residents. We made that decision reluctantly and only after we perceived that the RSG had not yet been responsive to certain questions as the time of the second community meeting was approaching. Although we do not believe there is anything inappropriate in sending our questions and thoughts directly to the attention of individual residents, we certainly would prefer to avoid such emails in the future. With that goal in mind we are writing to provide our thoughts on some important issues in the hope that your responses may eliminate the need for further individual communications.

With the March 10 meeting with SFWMD only a few days away, please note our request in point 2 below that James Evans of the City of Sanibel be included in that meeting. We also highlight in this message other specific requests and recommendations. We note from recent messages from the RSG and CSM officers that communications such as this one should be placed on the CSM website along with response comments from the RSG or Board, and request that you place this message in full on the website and notify all residents that you have done so.

1. The need for specificity.

Steve Hilger suggested that there should not be a vote on paving until the engineering proposal is completed and the permits have been obtained, and we repeated that suggestion. In a recent email to Marc, Lisa stated that “the Board and the RSG will be compliant with all permits required, have all financials determined, consideration for the environment, our health and safety and every question, within reason, answered ***before a vote is called.***” (emphasis added) That seems to resolve the question but we are unaware that the Board or the RSG has formally communicated that position to the residents. ***We request you do so.***

We wish to emphasize the importance of this issue. We seemed to be headed to a vote without specific information as to what the proposals entail and how much they will cost. For example, residents have not been informed of the scope or exact nature of any drainage that will be required under any proposal. Nor have residents been given any detail of the proposal to improve the roads without paving. What, for example is the specific material by size and grade being proposed for the base. Until those details are provided residents will be unable to assess the cost or desirability of each option. And until the drainage proposals are specified, residents will be unable to assess the effects of each option on their own property. You will recall the cost estimates provided by the Board in 2006 were itemized and possible costs that were not included in the estimates were listed. ***We request that before residents are asked to vote they be provided with similar itemized cost estimates and possible other costs will be identified, and that this information be provided in full for both options (a)improvement of unpaved roads and (b) paving.***

We forwarded to Lisa and Renny on Feb 28, 2017 at the suggestion of Jenifer Trier a message to correct the presentation in the Feb 28 presentation to reflect the future costs of maintenance for paving (page 27) in terms of time value of money. In the RSG slides the future cost of maintaining the roads (resurfacing) 15 years from now is estimated at \$117,000 in today's dollars, however (as shown in attachment to her message) our association is required by Florida statute to include the 15 year prorated annual resurfacing costs at future value dollars in the annual Capital Improvement Maintenance fund. The 15 year future cost of the resurfacing is \$222,736.43 based on the Florida Department of Transportation Material Cost Inflation Index. Therefore, when we vote on the roads, we also need to include the cost for future resurfacing at an annual prorated cost per lot of \$210 and the 30 year road replacement costs after year 2032. There is a note on the chart that says the numbers are “*based upon preliminary estimates only. All Amounts are today's dollars, not indexed for inflation, rounded.*” ***But we request that the RSG also provide the numbers for non-paving and paving on pages 27 and 28 in terms of future costs based on the time value of money, in order to give CSM members a fully accurate picture of the situation.***

We understand that specific proposals cannot be provided until the RSG has obtained all of the necessary permits – the scope and location of drainage required to meet environmental standards, for example, cannot be ascertained until the City and the SFWMD see and react to a specific proposal certified by the engineer. We are concerned, however, that the process currently in place that will provide specific information to residents only days before they will be asked to vote on this contentious question. ***Please confirm that no vote will be called until at least 60***

days after residents have been provided specific proposals, certified by the engineer, after all necessary permits have been obtained, and accompanied by itemized cost estimates for each option. Please also state whether the RSG intends to obtain more than a single bid for each option.

We had also understood that any vote would include at least three options, i.e., paving, improvement of unpaved roads, and continuing with the status quo. *Please confirm that understanding.*

2. Road integrity.

The question of drainage applies to two separate concerns: The drainage necessary to achieve a net benefit to the environment, and the drainage necessary to assure road integrity.

In 2006 the two engineers retained by CSM looked at the second question and stated that “As a general rule a road must have two feet of compacted material above the high water mark” and noted that CSM “has a very high water table.” (April 2006 Board letter circulated to all residents.) They concluded that “it is essential to have a well designed drainage system.” (Ibid.) As far as we can tell the “drainage” being suggested by the RSG and the engineer is to raise the roads a few inches above their current height. We are concerned that the question of road integrity has not been given sufficient study. We do not argue that paving will necessarily fail. Perhaps we will get lucky. But unless this issue is assessed in a more rigorous and scientific manner there is risk of road failure that will be very difficult and costly to repair.

There is significant support for the proposition that water from below is often the of cause potholes: One of us (Marc) who has studied the question has noted the literature and personal observations confirming that proposition; water from below was the primary concern of the engineers retained in 2006; and Steve Hilger’s questions to the Board and RSG included a quote summarizing the literature on that question (although it was not included when the RSG posted the questions):

A **pothole** is a structural failure in an [asphalt pavement](#),^[1] caused by the presence of water in the underlying soil structure and the presence of traffic passing over the affected area. Introduction of water to the underlying soil structure first weakens the supporting soil. Traffic then fatigues and breaks the poorly supported asphalt surface in the affected area. Continued traffic action ejects both asphalt and the underlying soil material to create a hole in the pavement.

See: <https://en.m.wikipedia.org/wiki/Pothole>.

Until very recently the RSG and the engineer disagreed with that proposition, and even now the latest version of the RSG slides discuss only the effect of water from above. But perhaps the RSG has now narrowed the gap of disagreement. Renny recently stated in an email to Marc that “I agree with you that in the literature there are references to potholes from water under and en-

tering the subbase, particularly on high volume, heavy truck traffic roads there can be a risk, but experience does not show that even in last January's wide spread flooding." With that understanding, the issue is no longer whether water below roads can affect their integrity but whether that concern applies to the particulars of our roads. We understand that the RSG relies on several factors to conclude that water from below will not cause potholes or otherwise affect their integrity if our roads are paved.

- First, it is asserted that CSM is different because porous soil underlies the community and this prevents the water level from rising and undermining the roads. This appears to be the primary argument for why drainage is not necessary. But it is a well-known fact Sanibel is different from many barrier islands in that it has a clay base which results in the retention of water regardless of the porous nature of the soil above the clay base. There is a sign along the boardwalk in the Bailey Tract which explains that the clay base and the retention of water it causes is the reason for Sanibel's flora and fauna (including mosquitos). Moreover, whether attributable to clay base or not, those who live here year round can testify that during the rainy season the water level rises up to and sometimes flows over the roads and does not drain away for several days or sometimes weeks. We have pictures of this occurring on Rue Belle Mer in 2015. Thus the "porous" argument doesn't seem to hold water – however porous our soil, it does not prevent the water table from rising up to the roads. You will recall that the engineers engaged in 2006 made the point that different segments of the roads were lower and closer to the water table and therefore more susceptible to potholes. That also seems to be borne out by experience: the worst potholes appear year after year in the same spots where water is retained after heavy rains. We have previously cited as an example that segment of Rue Belle Mer just prior to its turn along the Gulf. There, water raises up to and sometimes flows over the road, and does not dissipate for days or weeks. In a recent conversation with Joe Lutz, he raised this same example without prompting.
- Second, it is asserted that CSM is different because of its limited traffic. Our roads certainly have their share of traffic including large trucks on a daily basis – probably comparable to most subdivisions on Sanibel. Many of those other subdivisions were paved pursuant to City standards which required extensive drainage to assure their durability. We would not suggest that any paving must meet City standards. But it does not appear that the City exempts subdivisions that are otherwise required to meet those standards merely on some general assertion regarding road traffic. The City standards must be there for a reason and although we need not apply them strictly we should not ignore the concern they implicate.
- Third, there is a discussion in the RSG slides about possibly increasing the "infiltration rate" by replacing the grass and 2-3 inches of soil located within 10 feet of the roads. We understand this was explored by the RSG but rejected and will not be included in an eventual proposal from the engineer. But if it was included, this general approach would seem to again ignore the fact that Sanibel has a clay base and more importantly, that regardless of the reason, the water table sometimes rises up to segments of the roads. Even if water infiltrates through the grass at a faster rate that will be irrelevant

during the rainy season when the water table is above the grass. Likewise, the slides show a picture of a drainage pipe but there is no suggestion that such pipes will be included when a specific engineering proposal is presented. Even if such pipes are included, we do not understand how, standing alone, they would deal with the basic water table issue.

- Fourth, the current general proposal to pave will raise the roads a few inches above their current heights. But even if that were to place the base of each road an inch or two above the high water mark, and in some places it will not, that will not cure the problem. It is well known that if water approaches but does not reach the base of a road, traffic on the blacktop can cause a pumping action which forces water into the base thereby undermining it. Of course, we can all agree that blacktop does not support a road, the base does. We recently spoke to Dean Martin, one of the engineers retained by CSM in 2006 who confirmed the need for raising roads at least two feet above the high water mark and noted that, because of negative experience when that has not been done, Lee County has gotten very strict about the two foot requirement. We are not suggesting that paving must raise the roads two feet. The engineers noted in 2006 that the two foot rule “can be accomplished either by raising the road bed, or installing an adequate drainage system.” (Ibid.) As we understand it, the current engineer and the RSG are recommending neither solution.
- Fifth, there have been references to how well the paved entrance has held up. We have noted on a number of occasions that such a comparison is facially invalid. The entrance is several feet higher than any other section of our roads and we have never observed the water table rise to the level of the entrance as we have at other segments of the roads.
- Sixth, as with the entrance, there have been general comparisons with the paved roads in Gulf Shores. We note again that in 2006 the Board reported the factual observation of engineer Joe Lutz that “Chateaux Sur Mer has a somewhat ‘murky’ undersurface, and a very high water table compared to areas in the island center where the roads have been built without drainage systems.” A quick ride through Gulf Shores suggests that the roads are much higher than those in CSM. We do not suggest that we have scientifically compared the conditions in Gulf Shores to those in CSM. But neither has the RSG, and casual observation suggests that the superficial comparison suggested by the RSG is unhelpful.

The question of road integrity is a serious one. It seems we have moved from the engineering advice in 2006 which warned us to proceed with care because of the high water table in CSM, to a non-specific proposal which does not even consider the water table. ***We request that the Board and the RSG instruct the current engineer to consider our questions/points and provide an analysis of the issue with scientific rigor, including an explanation as to why his general proposal appears to depart from the basic principles set forth in 2006 by Dean Martin and Joe Lutz.*** _

3. City permits issue.

In response to an inquiry from Renny, Jim Jordan stated that the City has not taken the position that a City permit to pave will or will not be required and that “the City has not received nor been asked to evaluate any formal permit application associated with the Proposed Road Improvement Plan or Study.” He then stated that such an application “would be essential in determining what the next steps are for moving forward with this Project.” As far as we know this change of facts has not been communicated to the residents. ***We request that you post Renny’s inquiry along with Jim Jordan’s response. We also suggest that you attempt to integrate James Evans into the process, including seeking his participation in the March 10 meeting with SFWMD.***

4. Road safety.

We had anticipated that the RSG and the engineer would include safety options for the membership to consider, e.g., speed humps or vegetation choke points. Instead, there is merely a suggestion that no precautions are needed or that the issue can be considered after paving. You will recall that before the entrance was paved it contained some speed humps and it was asserted that the paving would not eliminate them, which of course it did. The narrow nature of Rue Bayou appears to present a special issue because we believe that speeds will likely increase on a road with little room for pedestrians and bicyclists to avoid the traffic. We were particularly disappointed that the engineer has not been called on to offer his expertise to present safety options including some of which we may be currently unaware. ***We respectfully request that the engineer’s mandate be expanded so that, after the safety options are included in the information for future votes, the membership, not just the RSG, can decide whether such precautions are worthwhile.***

5. Construction oversight.

When the entrance was paved there was an attempt to meet environmental concerns by slanting the road toward the lake. That was accomplished for some of the paved section although not all. To the degree there was a disconnect between the plan and its execution it may have been the result of a lack of professional oversight of the work of the contractor. ***We request that any proposal to pave include the cost of inspection and oversight of the work by a competent professional such as an engineer.***

Thank you for your consideration.

Ray Albright
Jim Egan
Marc Rowe