

# TOWN OF SOUTH BETHANY

## Minutes for SLR & SS Committee Meeting

Thursday, September 26, 2013 at 1:30 Location: South Bethany Town Hall

### Members present for this meeting.

Jim Gross, George Junkin, Chairperson, Dick Oliver, Dave Wilson

### Guests present for this meeting.

Joe Hinks (Code Enforcement Constable), Mike Powell (DNREC) and Bill Kirkpatrick (Homeowner), Leigh Giangreco (Staff Writer for the *Wave*)

- Reviewed minutes from 8/22/2013. Jim Gross added detail to what he presented relative to the DE Floodplain and Drainage Standards and Recommendations.
- Discussed recommendation for code change to require “freeboard” (12”, 18”, 24”, 30”, or 36”) and raising the building height limit. There was a general consensus that freeboard in the range of 18” to 36” should be required. There was general consensus that the height limit would need to be increase. There was general consensus that suggested recommendations would apply equally to new construction and the raising of existing houses. The recommendations would not require existing homes to meet the new requirements. However if an existing home was raised the new requirements would apply. In order to arrive at the specific values for freeboard and height limit, it was agreed that addition information is required as follows;
  - Review the CRS Manual to determine the effect of our recommended changes on our CRS rating. **Action Item – Jay Headman.**
  - Review data from the Elevation Survey (streets, bulkheads and storm drains) so as to be able to understand how our recommendations would affect building height limits. The current code limits height to 32 feet above the road. **Action Item – George Junkin.**
  - Review the elevation certificates and the actual house heights for new construction that occurred during the last two years. Establish how much freeboard the houses had. **Action Item – Jim Gross.**
- Discussed recommendation for code change to require higher bulkheads or to allow bulkheads to be higher than the neighbors’ bulkheads. The current code requires, “Bulkheads shall be constructed so that they connect and align with existing adjacent bulkheads and/or riprap, where practical.” Dave Wilson presented the follow to educate the committee on the cost of bulkheads.

Selecting Height Increase	Cost Estimate Assumptions	Residential Cost Estimates (2013\$) 50ft Lots w/3ft Baseline B/H Ht Fill Not Included
<ul style="list-style-type: none"><li>• 25 yr design life for wood (\$175/ft)<ul style="list-style-type: none"><li>– Min 25yr canal rise = 0.83ft (0.5ft over 15 yr)</li><li>– Min 45yr canal rise = 1.5ft (0.5ft over 15 yr)</li><li>– Worst 25yr DNREC Scenario = 1ft</li><li>– Worst 45yr DNREC Scenario = 2ft</li><li>– Sandy Flood Ht. = 2.5ft for 3ft B/H</li></ul></li><li>• 50 yr design life for vinyl (\$230/ft)<ul style="list-style-type: none"><li>– Min 50yr canal rise = 1.67ft (0.5ft over 15 yr)</li><li>– Height limitations for vinyl?</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Start with new 3ft bulkheads for a 50ft lot<ul style="list-style-type: none"><li>– Local contractor estimate</li><li>– \$175/ft for wood (2013\$)</li><li>– \$230/ft for vinyl (2013\$)</li></ul></li><li>• Cost for higher bulkhead increases exponentially by a factor Of 1.5 (Internet)<ul style="list-style-type: none"><li>– (New height/3)**1.5 x cost/ft x B/H length</li></ul></li><li>• Docks and fill not included</li></ul>	<ul style="list-style-type: none"><li>• Wood (\$175/ft)<ul style="list-style-type: none"><li>– 25yr design life</li><li>– \$19K for 2ft elevation (SLR)</li><li>– \$22K for 2.5ft elevation (Sandy flood level)</li></ul></li><li>• Vinyl (\$230/ft)<ul style="list-style-type: none"><li>– 50yr design life</li><li>– \$25K for 2ft elevation</li><li>– \$28.6K for 2.5ft elevation (Sandy flood level)</li></ul></li></ul>



**Town B/H Rough Length Estimate**

- Approximate End of Road B/H Length  
– 44 sites x 50ft = 2200ft
- Southern Boundary Wetland = 1170ft
- Western Boundary Wetland = 3120ft
- Northern Boundary Elevation >5ft (B/H not required)
- Approx Total Town B/H Length = 6490ft

**Town B/H Rough Cost Estimate (2013\$)**  
3ft Baseline B/H Height  
Fill Not Included

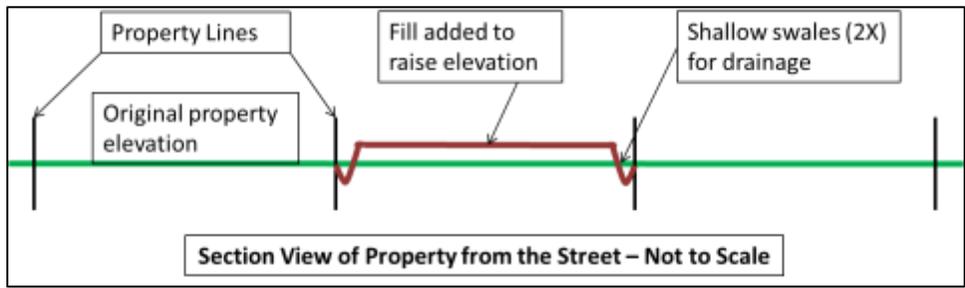
- Rough Estimate Total Length = 6490ft
- Wood (\$175/ft) 25 yr design life  
– \$2.5M for 2ft elevation (SLR)  
– \$2.8M for 2.5ft elevation (Sandy flood level)
- Vinyl (\$230/ft) 50 yr design life  
– \$3.3M for 2ft elevation  
– \$3.7M for 2.5ft elevation (Sandy flood level)

**Additional Considerations**

- Need buy-in from every lot owner
- Need State and County buy-in on road elevation
- Availability of bulkhead material and fill
- DNREC requirements for rip rap on natural waterways?
- All B/H's must meet height requirement  
– Higher B/H's would not be effective

Homeowner, Bill Kirkpatric, shared with the committee that he has contracted to replace his 45 year old wood bulkhead with a new wood bulkhead. He shared that the contracted cost was about \$11,000 for a 70 foot bulkhead (slightly less than \$160/foot). His desire was to raise the new bulkhead about 5.5" higher than his neighbors' for contouring of his property issues, not for SLR issues. The committee pointed out that the current code would not allow him to raise the new bulkhead above his neighbors. Bill needed permits from South Bethany, Sussex Co. and DNREC. George thanked Bill for sharing his information.

- There was general consensus among the committee members that the committee should not recommend a requirement that bulkheads be raised due to the significant cost impact to homeowners and to the Town. However there was general consensus that the code should be changed to allow owners to raise bulkheads above their neighbors' bulkheads, if they so desired.
- Discussed recommendation for code requirements relative to fill to raise the elevation of a homeowner's property realizing that care must be taken so that fill does not adversely affect runoff onto the neighbors' property. It was the general consensus of the committee that the code as currently written covers this, "Lots shall be graded toward the property lines to form a small, shallow swale at the property line. The swale shall have a slight grade toward a drainage system installed by the Town. No lot shall unreasonably drain onto any adjacent property. Questions regarding drainage shall be decided in the reasonable exercise of the Code Enforcement Constable's sound judgment." Below is a diagram that shows how the swales would be located.



- Mike Powell shared that the State plans to review all DE community plans for flood prevention/mitigation in two months and to provide feedback by January. New FEMA maps will be published in the fall of 2014.
- The meeting adjourned at 3:07.