

Chatham Hills Subdivision Board
April 18 2022
Meeting Minutes (Zoom Meeting)

Attendees

David Ryall, Danielle Adams, Jonathan Brown, Jon Carter, Chuck Fehl, Bob Layne, Curt Martin, Sheena Mathai, Lillian Ryall John Weigel.

Minutes

The minutes of the meeting of March 14 were reviewed and were approved unanimously – John Weigel proposed adoption and Bon Layne seconded.

Treasurer

Danielle Adams presented a written report of the current financial position.

Membership

Curt Martin reported that 252 lots of 271 have paid their dues and the special assessment and there is now \$13,242 outstanding.

Safety

John Weigel reported that there are no safety issues.

Social

Lillian Ryall advised that the egg hunt on April 9th was very well attended with 75 – 100 people present. They were slightly over budget for this as prices for the materials had increased and has advised Danielle Adams. The next event is the June garage sale.

Deeds and Restrictions

Ronda Harris was not present, but David Ryall reported that we are still awaiting the confirmation of the new by-laws being filed with the county (this was subsequently confirmed). He is asking here to contact a homeowner and the city concerning large commercial vans being parked every day outside their house.

Entranceways

Chuck Fehl said he has gone through his spring checklist, and all is looking good. Davey lawn will be working for the same price as last year on the medians etc. The trees in the medians will be receiving deep root feeding and the landscapers will put in the annuals in mid-May when the water has been turned on.

Parks and Commons

Jon Carter submitted the below report.

1. Repair of turf damage in park associated with removal of storm damaged trees:

Jon shared with two landscaping companies several pictures of areas in need of attention which were not included in the previous walk throughs (i.e., before the tree removal work was finished).

Wasmer Bros. (our mowing company) revised their bid based on the pictures, without need for another walk through. Total is \$13,727. (Jon favors having WB do this work in order to keep things simple, rather

than splitting responsibility for turf installation and mowing between two contractors. The seeding should get done soon in order to take advantage of rains to get the grass started. If we wait too long, and if we have a dry summer, the grass won't get a good start.)

Landscape Consultants (our landscaping company, esp. for entranceways) - Chuck, Bob, and Jon walked the park with Brent Opelia last week to show him the areas which weren't included in his original bid. After a couple days, Chuck emailed Brent to ask that his quote be submitted before the board's 4-11-2022 meeting. Hopefully his bid will arrive soon. (During the walk thru, Brent mentioned that he is struggling to find workers for the season but seemed confident that he could fix our turf by June).

UPDATES AS OF 4-18-2022:

Brent came back with estimate of approximately \$7000, but also indicated that he had lost one employee since our walk through.

Bob invited Serenity Landscaping Group to walk through and bid. Walkthrough is scheduled for noon on April 19.

Last week, Bob and Jon put seed and straw on several bald patches of park turf where branch piles had sat for 8 months. (This was out of scope of what the landscapers are bidding on.).

2. Mowing of common areas: (typically begins late in April)

I propose that we pay Matthew Ryall Landscaping to mow the park grass (1) adjacent to creek banks and (2) adjacent to wooded areas prior to Wasmer Bros. first mowing. The purpose of this proposed work is to define the desired edges of mowed areas which can then be followed for the rest of the season. The proposed request would be "to mow as close as possible to the creek bank and woods without risking safety". Suggested rate: \$20 per hour of labor plus expenses (fuel, blade sharpening or replacement, ..?)

3. Park cleanup: A sizeable tree branch fell approx. 2 weeks ago in a mowed area in the park, slightly west of the east pond. Bob and Jon cut it into pieces and dragged those over the creek bridge and dispersed them into the woods. They also cut back some trees which had fallen in the woods but still had significant protrusions into the mowed area. Bob plans to cut low-hanging branches from other trees just west of the east pond soon. These are currently low enough to block the mowers from getting through.

There was some discussion on the above. The board was hesitant to approve Wasmer's bid yet as we still need to hear from Serenity Landscaping – Jon will advise the board when their bid is in as the work should start soon. There was discussion around whether fixing all this damage will then be needed again if work on the paths or bridges etc. begins and David Ryall suggested we look at putting some stone down over the grass in the main entrance to the park off Brittany Hill to help minimize damage there.

On item two, Matt Ryall will be invited to walk around and see where he could trim to provide guidance to Wasmer's mowers.

Bob Layne submitted a detailed spreadsheet for the rebuilding of the bridges, a detailed overview which is appended to this report and also some pictures of a mock-up of how the bridges could look. He will now contact Northville lumber to see if they are interested in supplying the lumber / prefabricated

pieces for the bridges to ease assembly. Chuck Fehl is contacting two construction companies to judge interest in building the bridges with the prefabricated pieces.

The maintenance requirements were discussed (though it was noted that the current bridges have required no maintenance over some thirty years!). The feeling was that they should be stained once the wood has been in place for a year then every five years.

Bob Layne and Chuck Fehl will report back at the next meeting.

Therese Nagi stated that this week she will contact Joel Kahn of the Water Resource Commission (WRC) regarding follicular spraying of phragmites. When Mr. Kohn provides a date for the CHSA phragmites spraying, she will let the CHSA board. The WRC is responsible for spraying phragmites that can clog drains especially on roadsides.

Regarding the buckthorn near the Vicary Lane bridge, anyone who wants to bring a lopper and cut down buckthorn this Saturday, April 30. She will be cutting it down from 10:30 am to 12:00 pm near Vicary Lane bridge. She notified Danielle Adams to include a \$300 request for redbud trees and some plants to replace the buckthorn in the spring or fall, and she hopes to plant several native redbud trees and native plants to replace the buckthorn. These trees and plants would provide plant diversity and pops of color during the different seasons.

New Business

There being no other business the meeting was adjourned at 8.26 pm

Respectfully submitted,

Jonathan Brown

Secretary

Review of My Observations of the Existing Bridge Structures

Use of “open truss” beams to support the shorter span bridge structures

The three shortest footbridge structures are supported by “open trusses”/trestle steel framework that utilizes two parallel steel beams that are formed by joining back-to-back sections of steel plate that are shaped into right angles. If you position these vertical sides back-to-back, the flat sides form a flat surface that is approximately 6” in width. To this assembly, diagonal bracing is welded. If you take the second pair of back-to-back steel plates that form right angles and weld them to the opposite ends of the diagonal bracing, they will form a mirror image of the same structure above and below. The “open truss” beam will have parallel, 6” wide steel plates top and bottom. The top is where the decking is attached to form the bridge floor. The bottom beams sit atop concrete footings in the opposing banks and carry the load of the structure and the traffic moving over it.

Use of “I beams” to support the longer span bridge structures

The three longer bridges are constructed similarly with a steel structure that is in the shape of an I and that is how it gets its name of I Beam. The steel span consists of two parallel I Beams with top and bottom steel plates measuring 6” in width and are attached with a vertical steel section forming a beam that is 12” high.

Decking the steel structures that span the “creek” was accomplished by laying five 2” X 6” X 4’ PT boards consecutively and attaching them with decking screws and a carriage bolt to 2” X 4” X 16’ PT lineal boards beneath the decking material which was located between the two steel beams beneath it.

Suggested Structural Revisions to the Existing Construction Methodology & Estimated Costs of Lumber Materials, Fasteners, Hardware

1. Install 2” X 6” X 16’ boards end-to-end atop each of the two supporting steel beams and cut the last piece to the required length. To ensure that these boards are attached and stationary, 1-7/8” hardened steel fasteners will be “shot” into the wooden boards at specific intervals and will perforate the ½” steel “I beam” or steel “open truss” member. This will ensure that the decking material will be fastened directly to the stationary PT plate. This lumber cost is estimated at **\$801.82** (1/2 the total cost of column #9 Pg. 1).

A “ram set” tool will be purchased for an estimated **\$250** to drive 1-7/8” hardened steel fasteners through the 2” X 6” lineal and into the steel supporting beams. The costs of the fasteners and the 27 cal. blanks are **TBD**.

2. Increase the load capacity of the deck by utilizing 2" X 6" W OR 2" X 8"W with 1-1/2" thickness PT boards rather than using the "normal" decking boards of 5/4" or 1-5/32" thickness. By conducting a cost analysis to determine which width of the 1-1/2", the 2" X 8" width material costing **\$3,139.14** is more cost effective. The cost analysis provided with this report shows that **\$431.86** will be saved by using the 2" X 8" X 16' lumber for the decks.
3. Replace the 2" X 4" PT that were functioning as vertical structural support for the "top plate" of the "guard rail" and replace them with 4" X 4" X 37-1/2" H. This recommendation was made to ensure compliance with existing building codes for decks and wheel chair ramps. It is suggested the maximum distance of 8' between posts along each side. The estimated cost of these larger posts is **\$683.28**.
4. In addition to using the 4" X 4" PT posts, I recommended the use of a new, fabricated "post base" that allows the post to be securely fastened to wooden surfaces such as a wooden deck or concrete footers. These were introduced several years ago and their popularity is growing. The estimated cost of these posts bases and the suggested fasteners is **\$1,504.80**.
5. 2" X 6" X 16' PT boards will be used as the top plates for all guardrails on all bridges. Their purpose is to provide lateral support of up to 3 consecutive posts attached with 2-1/2" wood deck screws at 8 feet on-center intervals. The estimated cost for this lumber is **\$801.82** (1/2 of the cost noted in Column #9 pg. 1).
6. Continue the use of wooden braces alongside each 4" X 4" post which function as the supplemental structural support for the guard rail. I recommend and costed out the use of 2-2" X 6" X 3' PT diagonal braces. The estimated cost of lumber to construct these braces is **\$636.48**.
7. The demonstration "model" that was built was equipped with vertical balusters that were attached to top and bottom "rails". Their dimensions were 2" X 2" X 34-1/2"H. The purpose of these structures is to provide safety of pets or children falling off a deck, wheel chair ramp or footbridge. If you use wooden balusters, they have to be fastened no closer than 4" apart from the adjacent baluster. This means the quantities needed maybe large. In our case we have a total bridge length of approximately 262'; there are two guard rails per bridge and an average of 3 balusters per foot for every guardrail. The unit price for a 42" PT baluster at Home Depot is \$2.37. The balusters cost alone would be approximately **\$3825.18** and does not include lumber delivery fees, labor costs to install or fasteners cost.
8. Jon Carter suggested that we look at a new trend in stair ways and decks that alleviates the vertical wooden balusters and utilizes stainless steel, aviation-strength, cable that is certified against deterioration due to water, extreme heat and extreme cold temperatures.
9. If we assume the posts will be 37-1/2" high and stainless-steel cables will be positioned horizontally every 3 inches, we will be planning on 11 rows of cable along both guard rails of each bridge. The estimated feet of 1/8" stainless steel cable is 11,418 feet. Based on the best online

price available (\$.12/ft.) our cost would be **\$1370.08** (does not include tax or freight costs). Additional costs for this includes: 1) crimping tool **\$69.99**, (2) R&L handed swage lag screws for tensioning the 1/8" cables **\$792** and stainless steel "protector sleeves" **\$522.72**.

The estimated cost of this option is **\$2,754.79**. Comparing this to our estimated cost of **\$3,825.18** when using 2" X 2" balusters, the savings by using the stainless steel cable option is **\$1,070.39**.

10. #9 Deckmate 2-1/2" exterior red deck screws with star flat head will be used to attach all PT materials unless stated otherwise. I am estimating that we will use approximately 50 pounds of these fasteners at a HD estimated cost of **\$269.80**.

The project costs outlined in this communication when choosing the options that would providing the greatest savings totals \$10,322.13 .
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NOTE: Costs not estimated or included in this forecast include: 1) labor to deconstruct and reconstruct the wooden structures (either contracted or locally staffed), 2) Rental of a 20-30 cubic yard dumpster for collecting and hauling off and disposing any scrap new material or removed wood deck materials. 3) Cost to have our suggested plans drawn up and signed off by licensed civil engineer. We would use these drawings for our historical records, for inspection by city official, included in our bid package if licensed construction contractors are solicited, and our team if we staff.