



THE CURRENT

RIVERTON YACHT CLUB

Special Winter Edition 2021

RivertonYachtClub.org

Commodore's Corner...

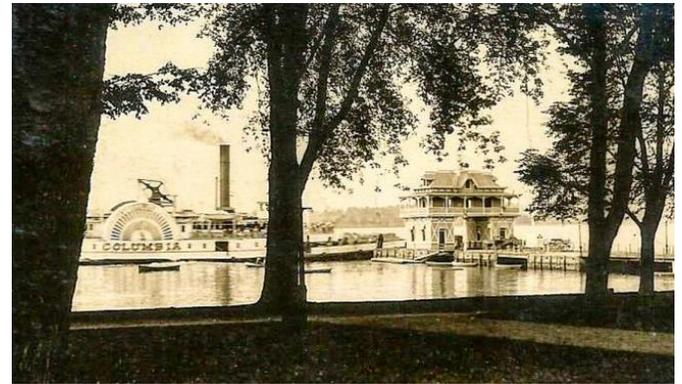
Over the past several years, it has been my privilege to work with the many talented and committed individuals behind the latest major pier project known as the Steel Sheet Pile Stabilization Project. The Riverton Steamboat Landing and Riverton Yacht Club are more than a Sailing Club. They are an anchor to the past that have become a cornerstone in the cultural identity of Burlington County and the Delaware Valley. The Steamboat Landing is a gathering place for people from surrounding communities and a watermark in the hearts and minds of thousands of people who have had experiences at the pier. Whether you have participated in summer sailing, the Learn to Sail program, attended one of the numerous RSLF sponsored events, watched the 4th of July Parade, and Raft Races, attended the Community Cocktail Party, or many RSLF sponsored events, or simply strolled along Bank Avenue on a summer evening watching the sailing regattas, you know this place is special.

The pier and clubhouse are over 150 years old. They are sitting on a concrete slab surrounded by steel sheet piles. Generations of members and friends have been maintaining this pier in a harsh environment of storms, strong current and ice flows. It is now our turn to act and the time to act is now. We cannot wait for a catastrophic failing of the sheet piles to jeopardize the pier and building that would ultimately cause us to lose this historic architecturally significant building and part of our community.

The Riverton Steamboat Landing Foundation has been able to secure a matching grant that covers close to half of the funds necessary to complete this project, but we must raise the necessary funds to take advantage of this remarkable opportunity.

Please join me in thanking the incredibly dedicated and talented people who have generously given their time, expertise, and donations to this urgent effort to preserve the pier and the Steamship Landing for generations to come. Below you will find a link to the RSLF website or reach out to RYC and RSLF board and committee members to see ways that you can contribute to this project today!

<http://www.rivertonsteamboatlanding.org/support.html>



Riverton Steamboat Landing Foundation

Riverton Yacht Club recently turned 150! The RSLF secures the funds necessary to ensure another 150 years.

SSP Stabilization Committee

Bob Johnson, Bill Bennett, Hank Croft, Jim Irwin, Glenn Smyth, Roger Prichard, Terry Fennel, Jeff Meyers

2021 Grant Committee

Hank Croft (Chair), Nicole Curran, Roger Prichard, Chris O'Brien, Glenn Smyth, Bill Bennett, Mary Keppel

Pier Repair Fund Raising Committee

Chris O'Brien, Hank Croft, Hugh Hutchison, Bruce Nicholson, Bob Martin, Catherine Lippincott, Devon Rau, Glenn Smyth Jr

SSP Stabilization Project Update- December 2021

Written by Bob Johnson

The Bulkhead Repair Project has now become known as the Steel Sheet Pile (SSP) Stabilization Project, but this is not the only development since our last report. Bill Bennett has been named as the Marine Infrastructure Coordinator and Board liaison to ST Hudson Engineers. He has a vast background

in Marine Engineering and has contributed a plethora of significant information throughout the process.

Background Refresh

Over the past 2 years, several areas of concern were identified during the committee’s investigation. Although the out-river Steel Sheet Pile bulk heads have maintained their integrity since they were installed in 2006, the Steel Sheet Pile bulkheads on the shore side of the club that were installed in the 1950’s are currently in bad shape. Several potential issues were observed. These problems included cracking / sinking decks, leaning / separating bulk heads and areas of seepage in the bulkheads. The SSP Stabilization committee hypothesized that the observed issues were primarily due to lack of tie rod integrity. It was necessary to enlist the help of a professional marine engineering firm to further investigate these concerns and to request a general estimate for repairs.



MOVEMENT WAS IDENTIFIED AT THE CAP WHERE A WELD WAS BROKEN AND THE CAP DISPLACED.

What’s new?

After requesting bids from three engineering firms, the ST Hudson Engineering firm was selected to do a professional in-depth evaluation of the bulkhead and deck. They have delivered an extensive analysis of the sheet pile bulkhead, deck, and utility passthrough area of the club. The results of the evaluation were somewhat worse than was expected. The following quotations were taken directly from the report.

Evaluation and Assessment

*“The inspected portion of the structure is in overall **POOR** condition due to numerous*

deficiencies. There is evidence of outward rotation and bowing of the sheeting; settlement and depressions to the ground surface; as well as sporadic areas of overstressing and breakage in the waler/tie-back system. It is our opinion that repairs should be undertaken in the near future on a high priority basis to arrest further deterioration, preserve the structural integrity, improve safety, and extend the structures useful life.” (Hudson Engineers March 2021)

Conclusions and Recommendations

“If not rehabilitated in the near future, the structure will continue to displace outward until it ultimately fails. It is our opinion that the structure can be stabilized in its current geometry to extend its useful life into the future.” (Hudson Engineers March 2021)

The report provides further details about the evaluation and conclusions. There are several photos in the report that support the observations that have been made. The report also provides two general repair concepts and the general estimated cost for each. The two repair concepts and the cost of each follow:

Repair Concept #1: Re-ring the Steel Sheet Pile Bulkhead with new sheet piles: ≈\$1,550,000

Repair Concept #2: Replace the Internal and External Bracing System: ≈\$650,000

What concept has been chosen and why

The SSP Stabilization Committee met and consulted with Hudson several times to consider the best path forward. After deliberation, the committee recommended to accept Repair Concept #2 as the path forward. It is believed that by replacing the internal and external bracing system, the problems will be remediated for many years--perhaps even 30 years or more. During this time, investment funds can be earmarked for the future generations of the club.



PHOTO SHOWS THE 6-INCH x 3.5-INCH STEEL WALE PULLED AWAY FROM THE INSHORE AND UPRIVER CORNER. THIS GAP IS BELIEVED TO HAVE BEEN CREATED BY THE “BULGING” INSHORE SHEETING.

Next steps

The next step for the project is to authorize the development of detailed construction plans from Hudson. The SSP Stabilization Committee received a proposal from Hudson for development of these plans and after review and revisions, the committee forwarded a recommendation to the RSLF and RYC boards. The Board approved this recommendation and development of the detailed construction plans is now underway. Upon finalization, these plans will serve as the basis for bids and selection of the contractor that will undertake the necessary reconstruction of the shoreside concrete pier and installation of the tie rod system.

How long will the project take and how will we pay for it?

A Grants Committee was formed in early 2021 as one means to help address funding this critical project. The Committee worked diligently to submit a grant to the NJ Historic Trust Foundation for a 1:1 matching grant that will reimburse RSLF for 50% of the project cost. This application was approved for recommendation by the NJHT Board in October 2021 and funds will be made available to RSLF upon legislative approval and signoff by the NJ Governor, anticipated by 1st the half 2022. Information from this grant will be applied to any additional grant programs that may be identified.

As part of the grant submission, Roger Prichard wrote an historical perspective of the club and Bill Bennett and the SSP team drafted an extensive report of the timeline and details of the upcoming project.

Excerpts of these sections of the application can be seen in the following articles of this newsletter.



VIEW LOOKING UP FROM BELOW THE 6-INCH x 3.5-INCH WALE AT SHEET No. 2 SHOWING THE SEPARATION AND BROKEN WELD DUE TO THE BULGING SHEETING WALL.

As an extension of the original Grant Committee, a dedicated Pier Fund Raising Committee is now being constituted as major fundraising efforts from club members, community, businesses, and other friends of RSLF/RYC will be critical as we embark upon this project.



VIEW OF SETTLEMENT AT THE APPROACHWAY INTERFACE

The need to complete this project is clear. Not only is it necessary for the safety of our club in the near future, but it is also necessary to ensure the Steamboat Landing and Clubhouse are available for future generations to enjoy. We have a responsibility to future sailors, members and the extended community to maintain this unique, iconic, historic landmark. Fortunately, the engineers have assured the Boards that for the moment, the club is safe as it currently is being used while we initiate this project; however, this window is finite and the significant

and progressing structural deficiencies must be addressed. We need to act! Your donations to RSLF have never been more important.

The Grant-

Written by Hank Croft, Chair RSLF Grant Committee

In the middle of February, Devon Rau called on behalf of the Commodore and asked me if I'd consider being chairperson of a committee the RSLF and RYC Board of Directors was forming to apply for the New Jersey Historic Trust 2021 Grant. Speaking with Chris O'Brien and Nicole Curran sealed my fate. Over the next 3 months, Chris, Nicole, Glenn Smyth, Mary Keppel, Roger Pritchard and Bill Bennett came together and produced an extremely complete and thorough application that was hand delivered in Trenton on April 28, 2021.

The initial engineering report from S.T. Hudson Engineering provided estimates that quickly put the application at Level II, a generous dollar for dollar grant, but one that require us to match all grant funds.

Working through Zoom meetings and late evening calls, seven sections with addendums plus a section for photos were assigned to everyone. Anything that I wrote was corrected and expanded by Chris, Nicole, Glenn and Roger. Roger was our historian extraordinaire; Chris became internet sleuth, copy editor, and contributor; Nicole was the finance whiz who kept all of the costs in order, added up and made sure the version updates were current in "BOX"; Mary Keppel supplied us with pictures, documents and was a key networker; and Glenn understood the construction documentation that was required and began splitting the overall hard and soft costs into the breakdown that that the application required. Bill Bennett, an indispensable member of the SSP Committee, joined the Grant Committee at crunch time and with Glenn, they developed a detailed description of the project and scope of work. Aided by RYC archivist, Terry Fennel, we were able to look back at the successful ISTEAs (aka Ice Tea) Grant application that was prepared by Joe Augustyn, Glenn Smyth and Tom Lippincott. This

provided a wealth of historical information and documents as well. We received letters of support from our State Representatives, Senators, the Mayor and Borough Council, and notable historical groups such as the Independence Seaport Museum.

Early in the process, Roger networked with Glenn Ceponis, our liaison from the N.J. Historic Trust. This allowed clarification of details and insight into what to focus on as we further developed the proposal and in July, Glenn Ceponis made a site visit to the pier. The majority of the committee was there to meet with him. He described the approval process and complimented the committee on the completeness of the application and our obvious detailed knowledge and love of RYC and RSLF. Previous federal and private foundation grants that we have received and successfully completed were a strong point as was the expertise of the committees we have in place. He spent the entire afternoon with us despite having had another stop planned.

Throughout the application process we have had the support of the RSLF and RYC Boards and the expertise of Bob Johnson, Bill Bennett, Jim Irwin, Roger Pritchard, and Glenn Smyth who have served as the dedicated SSP committee for the past two years.

Developing the grant was a labor of love and a fascinating look back at the rich history of the Riverton Steamboat Landing. The entire committee, the perfect group to get it done, is very proud of the application we submitted, and I am pleased to announce that in October of this year, we received the great news that our efforts were successful and we were one of the 2021 NJHT awardees!

While there is much work to be done, this is an important first step in this vitally important project that I know all of us will support in the upcoming year!

Historical Significance

Excerpt from 2021 RSLF Grant Application to NJ Historic Trust

Written by Roger Prichard

The Riverton Yacht Club's 1880 Victorian steamboat landing stationhouse/clubhouse dominates this last remaining steamboat wharf on the New Jersey banks of the 125-mile navigable Delaware River and Bay.

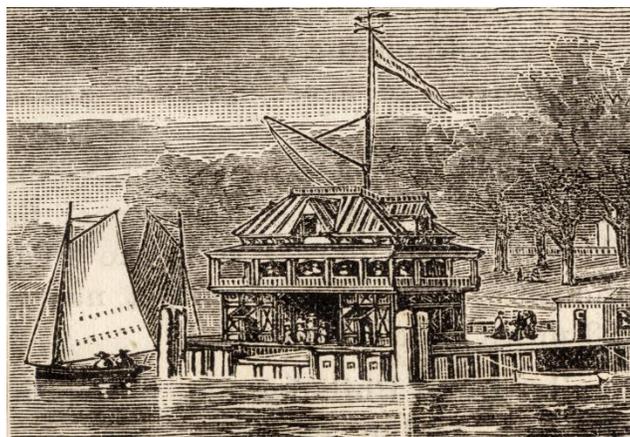
In the period before railroads flourished, waterborne transportation was the most efficient way to move passengers and freight, both locally and long distance. Our Landing is a unique survivor from the twilight of that era, constructed just as railroads were overtaking the riverine economy.

The preservation and interpretation of this structure are important to help today's residents and visitors understand life before the emergence of modern transportation modes.

The founders of Riverton built the Landing during the summer of 1851 to serve as the front door of their new town.

The wharf made it easy to commute to the town founders' workplaces in Philadelphia, within walking distance of its wharves. The steamboat trip took about 45 minutes.

In 1880 the Riverton Yacht Club replaced a workaday steamboat waiting room on the wharf with the fancy, Stick Style stationhouse/clubhouse we see today.



Both uses coexisted until scheduled steamboat service ceased in 1917 and the Riverton Yacht Club purchased the entire pier, which it still owns today.

The river is a harsh environment which battered the wharf and historic structure from the start. Though the wharf has been encased in modern materials to survive, the historic 1880 stationhouse/clubhouse still stands on that foundation, true to its original appearance.



The Founding of Riverton

On February 8, 1851 ten Philadelphians purchased farmland to create the "summer resort" of Riverton. Remarkably, all ten founding families actively engaged in the movement to abolish slavery and nine of them belonged to the Hicksite sect of the Religious Society of Friends (Quakers).

The founders included old Philadelphia family names: Biddle, Wharton, Parrish, and Clothier. One was J. Miller McKim, the man who ran the Pennsylvania Anti-Slavery Society.

They hired Philadelphia architect Samuel Sloan to lay out the town and design the founders' ten homes. Historian Henry-Russell Hitchcock has called Riverton "one of the first totally planned residential subdivisions in the United States." This wharf was to be its front door.

The first mention of Riverton – and its proposed steamboat landing – appeared in the Philadelphia *Public Ledger* for April 9, 1851.

The founders were advertising for contractors for the wharf in the May 27, 1851 Philadelphia *Public Ledger*. The riverbank must have been a frenzy of workers, animals, and materials. By the end of the summer, ten impressive “villas” were complete, with smaller homes, supporting buildings, a street grid... and this new, substantial wharf.



The Public Ledger reported on September 4, 1851 that this took just five months. New Jersey Governor George Franklin Fort had arrived at this pier on the steamboat *New Philadelphia* two days earlier with his family to admire the town and stay the night.

Daily scheduled steamboat service to Philadelphia began that first season.

The steamboats also handled some freight. Wagons would line up on the pier awaiting the arrival of the next boat.

The town’s founding partners owned the pier and soon received a state-issued charter as the Riverton Improvement Company.

In 1868 a committee of residents purchased the wharf and later chartered the Riverton Iron Pier Co., which took possession in 1886. After steamboat service ceased in 1917, the Riverton Yacht Club purchased the entire pier in 1918 and has owned it ever since.

The Riverton Yacht Club

In the 1860s public interest in sailing and rowing surged and Riverton residents established the Riverton Yacht Club on July 1, 1865.

In continuous operation ever since, RYC is the oldest yacht club on the Delaware River; only a handful of clubs in the country are older. In its 156 year history,

countless children (and adults) learned the joy of sailing here.

Unlike many such clubs, RYC has no full-time employees and relies on volunteer effort by its members. They show a wide variety of ages, backgrounds, and occupations.

Its members have won more than 150 national and international championships.



In 1880, the Yacht Club built this stylish clubhouse on the wharf, designed to also accommodate waiting steamboat passengers and the “wharf man,” who handled freight and caught dock lines. One of his duties was to ring a large bell atop a pole to alert tardy passengers on foot that the steamer was in sight.

In the fall of 1920 RYC moved the clubhouse back from the end of the pier to accommodate trapshooting contests.

In the mid-1950s the 1/3 of the wooden wharf closest to shore was failing and in spring 1957 the club surrounded that section with modern steel sheet piling.



By 1970 the clubhouse foundation had settled alarmingly. A large concrete slab was constructed within the wharf and the first floor of the clubhouse was completely rebuilt in-kind.

By 1990 some of the 1957 steel bulkheading was leaning dangerously due to failure of its buried tie-rods. The club replaced them, stabilizing the bulkheads as they stood.

On March 5, 1999, the National Park Service gave final approval to the nomination to the National Register of Historic Places for the Riverton Historic District. The clubhouse is a contributing resource. Its surrounding wharf is its integral foundation infrastructure.

The later 1990s saw the approaching failure of the wooden bulkheading on the outer 2/3 of the pier. In 2000-2003 a major project surrounded it with steel sheet piling, using funds from an ISTE A grant and substantial donations raised by the club and the newly incorporated Riverton Steamboat Landing Foundation. The total project cost exceeded \$1 million.

Today, we are addressing the next challenge: the inshore face of the 1957 bulkheading is also bulging and requires stabilization soon to avoid certain failure. Without completion of this critical phase of work, we are faced with losing the foundation for the clubhouse and, consequently, the clubhouse itself.

Preliminary Project Summary/Execution Plan

Excerpt from 2021 RSLF Grant Application to NJ Historic Trust

Written by Bill Bennett

Background

The Riverton Steamboat Landing Foundation (RSLF) has observed cracking and settlement at various locations on the 4,500 sq. ft. concrete deck positioned on the top of the marine structure located off the bank of the Delaware River at Riverton, NJ. The deck is surrounded on three sides by a structural steel sheet pile bulkhead installed in 1957 that was also observed to have substantial lateral (outward) movements. This entire structure forms the

foundation infrastructure of the historic 1880 Riverton Yacht Club clubhouse, a Contributing Resource to the Riverton District listed on the National Register of Historic Places.

In January 2021 the RSLF contracted with S.T. Hudson Engineers, Inc. (Hudson Engineers) to perform a detailed assessment of the pier structure and to provide recommendations for repairs. Hudson Engineers is a widely recognized leading authority in the design, engineering and construction of marine structures and has successfully completed similar projects for numerous clients along the Delaware River and specifically has performed more extensive upgrades for the Riverton Steamboat Landing Foundation at another part of this same facility circa 2001.

In March 2021 Hudson Engineers performed an engineering survey and assessment of the marine structure and issued a report containing their findings, recommendations for repairs and construction cost estimates for two Options for repair of the marine structure (See Attachment D). Due to unrestrained movement of the existing sheet pile wall system, one of the two Options must be implemented in the near future to prevent further movement or failure of the existing sheet pile wall system.

- **Repair Option-1:** Requires the installation of approximately 190 linear feet of new steel sheet piles, the installation of new structural tie-rods with a concrete block anchoring system. To facilitate installation of the new tie-rods, the existing 4,500 sq. ft. concrete deck must also be demolished and replaced. Estimated cost: **\$1,500,000**
- **Repair Option-2:** Allows continued use of the existing steel sheet piles but requires the installation of 400-linear feet of new structural walers, the installation of new structural tie-rods with a concrete block anchoring system. To facilitate installation of the new tie-rods, the existing 4,500 sq. ft. concrete deck must also be demolished and replaced. Estimated cost: **\$645,000**

The RSLF reviewed each Option and selected Option-2, which relies on the continued use of the

existing steel sheet pile structure, augmented with new structural tie-rods and a new perimeter waler system. The benefits of selecting Option-2 are that the total construction budget is substantially less costly than Option-1 and that it will not require extensive and time-consuming permitting from multiple agencies with jurisdiction over this navigable waterway. The drawback of Option-2 is that the existing sheet piles will not be replaced. They exhibit minor deterioration, are substantially out of plumb, and are less aesthetically appealing when compared to a new sheet pile system as proposed in Option-1. When complete, the existing steel sheet pile walls will continue to have the same appearance and alignment as presently observed today, but all movement and loss of fill earth will have been arrested.

PLANNING PHASE

The RSLF Project Team will actively define and manage three major parts of the Project: the Project Scope, the Project Schedule and the Project Budget. Each of these are listed below in as much detail as possible at this preliminary stage:

2A) SCOPE

The scope for Repair Option-2 includes the following features:

- Demolition of existing 4,500 sq. ft. concrete deck
- Excavation to provide access for the installation of new tie-rods and an underground concrete anchoring system
- Excavation and modification of existing underground utilities (electric, potable water, sewer, and rainwater drainage) to correct a settlement issue and to facilitate installation of new tie-rods
- Placement and coating of new tie-rods and construction of an underground concrete anchoring system
- Installation/compaction of new backfill
- Installation of new structural waler (Outside face of existing steel sheet pile walls)
- Repair of voids/damage to existing steel sheet pile walls
- Cleaning/recoating of the exterior face of the existing steel sheet pile walls

- Installation of new 4,500 sq. ft. concrete deck

SCHEDULE

The RSLF plans to complete the engineering design by year end 2021 and to complete construction for Repair Option-2 within calendar years 2022/2023.

- Engineering: The RSLF is presently finalizing a contract with Hudson Engineers, to begin immediately, to prepare the Detailed Engineering and complete it by the close of 2021. With Hudson Engineers' assistance, RLSF will secure competitive bids for construction from qualified construction contractors by early Spring 2022.
- Construction: Construction is planned to be executed over a 6-month period when the pier is closed for the Winter season, scheduled so as not to interrupt seasonal operations of the Riverton Yacht Club, expected to close by October 2022. The work will be broken out into two Phases with an interruption in work between phases to allow for the settlement of backfilled soils and to avoid the placement of concrete during the harshest winter months. Construction is expected to be completed prior to normal reopening of the pier in early April 2023.

CALL TO ACTION

Prior generations have provided us the opportunity to be the current custodians of this historic, iconic landmark that provides us with a glimpse of history and access to a great American waterway.

There are many people working behind the scenes to save this pier for future generations. Help us to ensure its future.

Donate Now!

<http://www.rivertonsteamboatlanding.org/support.html>

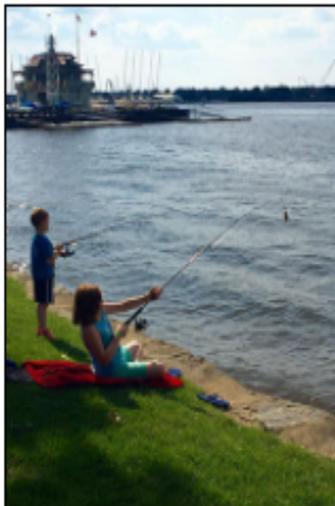
Make A Gift

[How to Give](#) [RSLF Video](#) [Amazon Smile](#)



Why give?

Riverton is our dwelling place, when you think of Riverton what image(s) come to mind? The pier and clubhouse building are distinguishing visual links to our community. Our pier is a maritime gem, completed in 1851, it is the last steamboat landing on the Delaware River. Continuing support is vital to the preservation of this historic site. The lessons learned from the experience of two decades ago are that the maintenance and repair of the pier and clubhouse take significant resources.



What sets Riverton Steamboat Landing Foundation apart?

Is it because our pier is located in one of the first planned communities in the nation? Thanks to the founders for this river front rarity, access to panoramic views of the Delaware, and access points to the water. You've seen the wedding parties being photographed, fishing at the river's edge, the July 4th activities from parade to raft race. This place is special! It's a place many call home with families who have lived here for generations. Will you help us to preserve the Riverton Steamboat Landing so the next generations— for the next 150 years — will have this place to call their home?



Where will your donation go?

All donations to the RSLF will be used to preserve and maintain the physical structure of the historic Riverton Steamboat Landing pier and building, to prevent a recurrence of the deterioration that occurred at the end of the 20th century, and to generally provide funds to carry out the charitable purposes of the Riverton Steamboat Landing Foundation.

The Riverton Steamboat Landing Foundation is affiliated with



How to give

Checks should be made payable to the Riverton Steamboat Landing Foundation and mailed to:

Riverton Steamboat Landing Foundation
P.O. Box 2911
Riverton, NJ 08077



Donate



[Click for more information](#)

Additional ways you can support the Riverton Steamboat Landing Foundation

- Matching (Employer) Gifts
- Planned Giving & Bequests
- Gifts of Stock, Securities, Charitable Trusts
- Charitable Gift Annuity
- Corporate Underwriting

Riverton Steamboat Landing Foundation is a 501(c)(3) non-profit organization, making your gift tax-deductible as allowed by law. Federal Tax EIN: 22 - 3497699