



# PROPOSAL

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ROLLING MEADOWS, ILLINOIS  
60008

December 15, 2015

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This proposal is furnished for the Haddorff concert grand piano, serial № 112901.  
It has been prepared for the Village of Orland Park Recreation Dept, December 15, 2015.

The proposal is divided into three sections:

- I. The acoustical-structural
  - A. Materials
  - B. Cost
- II. The mechanical or action
  - A. Materials
  - B. Cost
- III. The piano finish and cosmetics
  - A. Cost

Piano restoration is a complex activity made up of many operations, some critical, some seemingly insignificant yet necessary. This proposal attempts to define those operations which are focused on restoring this piano to a state of total playability as would have been exhibited when this piano was new. Additionally, this proposal touches on those aspects of tone building which will allow this piano to realize its full acoustical potential. Any concerns or questions not answered in this proposal can be addressed verbally or in writing.

## PIANO

Haddorff 9' Concert grand piano in ebonised veneers, № 112901, manufactured Rockford, Illinois 1928, in the possession of the Village of Orland Park Recreation Dept.

## I. The Acoustical-Structural Restoration

<i>GUT PIANO</i>	After thorough documentation, the piano is completely disassembled. All hardware is removed and catalogued. Tension is taken off the strings gradually; all treble and bass strings are removed; tuning pins are extracted from the pinblock. The cast-iron plate and all corresponding hardware are removed from the cabinet. This pinblock is cut away from the cabinet for later duplication.
<i>CORRECT SOUNDBOARD DELAMINATION</i>	The soundboard is gently heated over a period of days so as to effectively reach a moisture content of 4.5% - 6% EMC. At this point, any delamination between the soundboard and ribs which may be present can be corrected.
<i>REPAIR SOUNDBOARD</i>	With the soundboard at a low moisture content, the board is repaired where it exhibits compression (ridges) or contraction (cracking). There are two techniques for this repair, both of which may be utilized: shim repair with quarter sawn spruce shims, or a 4-part epoxy repair (consolidant and filler). The method will be determined at the time of repair when the cracks/ridges are opened.
<i>REFINISH SOUNDBOARD</i>	After the soundboard is repaired, the soundboard is scraped of its existing finish. No strippers are applied to the soundboard. The soundboard is sanded smooth and a shellac polish is applied. Any decals which are original to the soundboard are duplicated and placed underneath the final polish coat.
<i>REPAIR BRIDGES</i>	Should the bridge(s) show signs of stress cracking, the bridge pins are pulled and a low viscosity epoxy is injected into the wood followed by new bridge pins. The bridge surfaces including notches are cleaned and resurfaced, the top with a new surface of graphite.
<i>INSTALL PINBLOCK</i>	The original pinblock, having been cut away from the case, is duplicated utilizing new multi-laminate pinblock stock of Canadian Maple. The new pinblock is shaped to the plate flange to assure a solid fit.
<i>CAST IRON PLATE</i>	The plate is sprayed with bronzing lacquers/enamels. The embossed lettering on the plate is hand lettered. All plate hardware—lag bolts, screws—and duplex bars are re-plated in hi-polish nickel.

*STRINGING*

The plate is re-installed in the case to its original fore/aft position and to a vertical height which best establishes the correct degree of downbearing on the long and short bridges. Agraffes are removed, reamed and polished to a gloss luster and re-installed. The plate is dressed with new felts matching the original thicknesses. The piano is strung with new steel wire and custom made bass strings, all of which match the intended scaling of this piano.

*DAMPERS*

The damper guide rails are cleaned and sanded. Should there be unnecessary play in the bushing, the bushings will be replaced. The damper heads are cleaned and refinished. New damper felts matching the original configuration are glued to the damper heads. The damper action (back-action) is refurbished with new lift felt, lubricated and regulated to give the correct damper lift at approximately ½ key travel. The damper felts are voiced to assure proper termination.

*TRAPWORK*

The trapwork located on the underside of the keybed is removed; all pivot centers are cleaned and the pivot pins polished. New cloth and leather is installed to the correct dimensions. The trapwork is regulated to spec.

*PEDALS*

The pedal assembly is disassembled, cleaned, polished and lubricated. New felts and leather are placed according to spec. The assembly is replaced and regulated concurrent with the trapwork.

*TUNE*

The newly strung piano is gradually pulled up to pitch over a succession of *chip tunings*. Thereafter follows a schedule of tunings and string seatings which attempt to stabilize the piano before it leaves the shop.

**I, A. Materials (Acoustical-Structural)**

Multi-laminate Pinblock (Canadian Maple)	Mapes Bass Strings
Mapes Treble Wire	Nickel Plate Tuning Pins
Stringing Cloth & Felts	Damper Tray Lift Felt
Renner Damper Felt	

## I, B. Acoustical-Structural Restoration Costs and Warranty

The cost for all Acoustical-Structural restorative work as listed under section I of this proposal is **\$8000.00**. This cost includes all labor and material charges as outlined in section I. Acoustical-Structural work is guaranteed for a period of ten (10) years *only* as to the effectiveness of new materials (i.e. pinblock, strings, etc.) This warranty does not cover the ordinary effects of wear and use.

## II. The Mechanical or Action Restoration

<i>KEYFRAME</i>	The keyframe is stripped of all felt and punchings including backrail cloth. The balance rail and front rail pins are deburred and polished. The wood is solvent cleaned and new cloth and punchings are placed. Keyframe glides are polished.
<i>KEYSTICKS</i>	The keysticks are rebushed at the front mortise and the center mortise. The ivory keytops (whites) will be cleaned and polished. 4 ivory tops with chips will be filled. The ebony accidentals (blacks) will be lightly sanded and buffed to a soft sheen. Capstans are deburred and polished. The backchecks are replaced with new matching backchecks mounted onto new wires.
<i>STACK</i>	The action stack assembly is disassembled and cleaned. The hammer rail is re-papered. New hammer-shanks and flanges are installed and traveled. New repetitions (wippens) are installed and traveled. New hammers are cut, bored, coved, shaped, tapered and installed.
<i>REGULATION</i>	The keysticks are replaced onto the keyframe and leveled to give a 1/32 in. crown at e <sup>1</sup> . The action is given an initial bench regulation to bring it into spec. The regulation is then refined with the action in the piano.

*VOICING*

Tone building is done through the later stages of restoration, after the piano has been thoroughly regulated and tuned numerous times. The strings are seated at all bearing points. It is also well to remember that hammers mature after about 50 to 100 hrs. of playing time. Therefore, tone building is better understood as a process that continues after the piano leaves the shop.

II, A. Materials (New Action)

*ACTION*

Complete set Ronsen Special Weickert felt hammers	Complete set Tokiwa backchecks
Complete set Renner Repetitions (Wippens)	Backrail Cloth; balance and front rail cloth
Complete set Renner shanks/flanges	Misc. cloth and felts

II, B. Mechanical or Action Restoration Costs and Warranty

The cost for all new action work as listed under section II of this proposal is **\$7000.00**. This cost includes all labor and material charges as outlined in section II. New action work is guaranteed for a period of ten (10) years *only* as to the effectiveness of new materials (i.e. hammers, repetitions, etc.) This warranty does not cover the ordinary effects of wear and use.

III. The Piano Finish and Cosmetics Restoration

The piano case and all parts are stripped of the original finish. Veneer losses are repaired with new matching veneers. All other repairs to the case and parts are made at this time. For an ebonised finish, the case and parts are stained black. Sealer coats are then applied with repeated sanding in between coats, the ultimate goal being to fill and level the pores of the wood. This is a closed or pore-free finish. With this accomplished, the case and pieces are given numerous clear top coats to build depth. Finally the case and parts are hand rubbed to a satin gloss. The finishing material used is lacquer.

All hardware is removed in the process of restoration. Exterior hardware such as large and small top hinges, lyre pedals, continuous hinge, screws etc. will be re-plated in hi-polish brass. Non-exposed hardware will be cleaned to a brush finish or buffed to a polished finish depending on location.

The piano is re-assembled according to the initial documentation. All felts, cloth and buttons which functionally decorate the case and parts are replaced with new felts, cloth and buttons. The nameboard decal will be duplicated and installed under the final clear finish coats.

### III, A. Piano Finish Restoration Costs and Warranty

The cost for all re-finishing work as listed under section III of this proposal is **\$9500.00** (ebonised finish, satin sheen). This cost includes all labor and material charges as outlined in section III. Finish work is guaranteed for a period of five (5) years provided the piano is kept in an environment that *does not* include excessive exposure to sunlight and extremes in temperature and *does* include a consistent humidity level between 40% to 60% throughout the year. This is not difficult to achieve and advice on how to maintain these levels will be gladly given. This warranty does not cover ordinary effects of use and wear such as nicks, scratches, water damage, imprints etc.

TERMS

I.	Acoustical-Structural Restoration	\$8,000.00*
II.	The Mechanical or Action Restoration	\$7,000.00*
III.	Finishing and Cosmetics: ebonised finish; satin rub sheen	\$9,500.00*
<i>Total Restoration</i> cost for all three operations (I, II, III) combined		<hr/> \$24,500.00*

Payment would be made in 3 installments (40% - 40% - 20%): The first installment is due at the inception of work; the second installment will be invoiced during the course of the work; the third and final installment will be due at the completion of work. If your interest would be to have us begin concurrently all three operations or, a *Total Restoration* as indicated above, the payment schedule would be as follows:

<i>INSTALLMENT 1 (40%)</i>	\$9800
<i>INSTALLMENT 2 (40%)</i>	\$9800
<i>INSTALLMENT 3 (20%)</i>	\$4900

\*Please note Moving costs are incurred through a third party carrier and are not included in the itemized costs for the operations as listed above. We can furnish you with an estimate for moving costs should you desire. Should you desire to have the piano completely restored as listed above as *Total Restoration*, Piano4te, Inc. will pay for all moving costs.

AGREEMENT

Should this proposal meet with your approval, please indicate below which option(s) you favor. Finally, sign and date one copy of this proposal and return to us in the enclosed envelope. ***Please do not send a payment with this proposal. Your initial payment will be invoiced when the work commences.*** Unless signed and returned, the terms of this invoice will remain effective for ninety (90) days from the date of this proposal.

It has been a pleasure to meet with you and discuss your Haddorff piano. We look forward to being of service to you in this regard.

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|--------------------------|--|--------------------|
| <input type="checkbox"/> | I. Acoustical-Structural Restoration           | \$8,000.00         |
| <input type="checkbox"/> | II. Mechanical or Action Restoration           | \$7,000.00         |
| <input type="checkbox"/> | III. Finish and Cosmetics Restoration          | \$9,500.00         |
| <input type="checkbox"/> | <b>Total Restoration (I, II, III as above)</b> | <b>\$24,500.00</b> |

Please sign and date:

(Signature) \_\_\_\_\_

(Date) \_\_\_\_\_