

Sept. 17, 2024

RE: Double R Ranch Pool Refurbish Options

From: Dan Hyatt, President Hot Tubs Northwest, LLC , Certified Building Professional -Pool & Hot Tub Alliance

Attn: Amy Ashby-General Manager & Board Members

Preface: After Discussions with Amy and 2 board members poolside along with the Double R Ranch Pool Assessment Also dated Sept. 12, 2024, I've prepared the following quotes:

1. Option 1 is to refurbish the existing pool in its present shape.
2. Option 2 is to build a new 20ft. by 40ft. pool within the west end of the existing pool

Option 1: Refurbish existing pool and all related components:

Pool Equipment Proposed, Target flowrate 190-200 GPM = 5.15-5.4 hour turnover rate:

Pool Equipment Room List:

1. 1-Pentair 5 HP. Variable Speed. XF Pump
2. 2- Pentair CCP 420 Sq. ft. Cartridge Filters with required 2 extra sets of filter element (8).
3. 1-Raypac 406,000 BTU ASME LP Pool Heater with draft hood, B-Vent, roof jack and top cap.
4. 1- Pentair HC-3315 Chlorinator
5. 1- Blue/White 4" PVC Flowmeter
6. 1- Line pressure gauge
7. 5- 2" Sch 40 Ball Valves (skimmers)
8. 1- 4" Sch 40 Ball Valve (Main Drain).
9. New PVC Skimmer, Main Drains and Return Lines
10. Pentair LX 8202 Emergency Shut off/Alarm

Pool Structure and related components:

1. 2- VGB Main Drains with correct sumps with 4" PVC Piping Balanced Manifold to meet VGB code.
2. 5- new skimmers with equalizers. With new 2" PVC sch 40 individual piping back to equipment room.
3. Core Drill to install 7- new return inlets (off of a 4 " manifold stepped down hydraulically)
4. Install water plug around all new pool fittings
5. Remove 1 layer of existing pool plaster
6. When 1 layer of plaster is removed if the rust spots visible now in the pool are not superficial and go deeper, then additional rate of 200.00 an hour to expose rebar and epoxy will be required.
7. Remove existing coping, tile and mud-bed (where necessary).
8. Install new waterline tile, depth markers, and tile on all step lead edges (markers).
9. Install form and pour new entry step in swimdeck (14" deep area at NE corner).
10. Remove existing Pool Light niches and fill in with concrete
11. Install new hand-hold Brick Coping
12. Install Foam Backer Rod on concrete deck side of Brick Coping

13. Install Polyurethane self-leveling caulk control joint between concrete deck and Brick Coping
14. Install new non-slip tile depth markers and no/diving markers at correct intervals on pool deck.
15. Install new 2 bend handrail, anchors & escutcheons at transition from swimdeck area (14" deep) to main pool area 3- 3'8" deep.
16. Install new elongated figure 4 handrail at N center of swimdeck area (14" deep area)
17. Install 2 new pairs of figure 4 handrail at vertical insert steps at deep end north and south wall.
18. Install 2 new sets of 3 step insert steps
19. Apply Bond Coat to pool
20. Apply 2 coats of smooth white plaster
21. Add Rust inhibitors to pool
22. Initial Pool Balance alkalinity, calcium, acid products (8 lbs chlorine allowance).

Job Site Access, Pool Deck removal, Ditches, French Drain, gravel substrate, etc.

1. Import 160 yards of hog fuel to build access road from main gravel parking area along north side to pool area. This is required for equipment, gravel trucks, concrete trucks, and pool related equipment access.
2. At the end of job remove Hog Fuel rd. and clean up area. Note does not include topsoil, or prep for grass re-establishment.
3. Cut Pool Concrete 6" deep at outer edge perimeter of pool coping to assure rebar that is doweled into pool shell does not damage top of pool structure (when pool deck is removed).
4. Remove existing Pool Fence, and haul away.
5. Remove existing Pool Equipment room and haul away.
6. Set aside or work with Double R Ranch to move the existing chemical portable shed.
7. Set temporary fencing (through NW Fence) for an initial 3-month period, additional month to month after that is in "options"
8. Remove existing concrete around the pool and haul away.
9. Re-grade pool concrete deck area to correct 1/4 to 1/2 inch slope and install 4 Inches of crushed rock and compact as underlayment for new concrete pool decks.
10. Dig trench for new electrical service from Canopy (where main panel is) to Pool Equipment Room.
11. Dig French drain across (just north of existing fence) north side of pool around to west end to keep water from flooding north edge of pool deck.

New Pool Equipment room construction description:

- The structure will be 12ft. X 12ft. outside dimension with an 8' wall on the front, sloping on a 2/12 pitch to the rear. This will make the back wall approximately 6' tall. There will be 12" overhangs on the front and back and 6" overhangs on the sides.
- The structure will be framed on a pressure treated 2x4 plate secured to the existing concrete. Walls will be built with 2x4 framing and the roof will use 2x6 framing for rafters. 5/8" CDX plywood will be used for roof sheathing.

- There will be a 3/0 solid steel door installed with lock and deadbolt on the front wall. No windows will be installed.
- The siding will be 4x8 sheets of T111 primed cedar like grain siding. It will have vertical grooves at 8” or 4” on center. The overhangs will be exposed rafters with cedar fascia boards. The siding and soffit will be painted one color, white has been quoted, but an alternative color can be used if requested.
- Roofing will be steel standing seam style with edge trim pieces to match. A color can be determined.
- The interior will be completely insulated. Walls with R-13 batts and ceiling with R-19 batts. The insulation and ceilings will then be covered with ½” CDX plywood. Any electrical will need to be completed prior to plywood installation. There is no painting or other finishes included inside the building.

Engineering: Engineering provided by Engineering Consultants Northwest (ECNW).

Engineering (by ECNW) with stamped drawings, and site inspections for the following Option 1:

1. Main drain grates and plumbing hydraulics to meet VGB and WSDOH Code
2. 5 Skimmers & Return Piping hydraulics to meet VGB and WSDOH Code
3. 12 by 12 equipment room structure plan to meet Whatcom County Planning
4. Overall Facility Plan to meet WSDOH and Whatcom County Planning
5. Concrete deck and fencing plan to meet WSDOH and Whatcom County Planning
6. Site Inspections in advance and final site inspections with letter to WSDOH confirming work was done to approved plans

Permit Applications:

Note: submittals listed below are included but cost of submittals not included (info on that below).

WA State Dept. Of Health Water Recreation Facilities Application

Whatcom County Planning Building Dept. Permit Application

Engineered drawings (ECNW Northwest) For the above WADOH submittal and Whatcom County Submittal

WSDOH Facility remodel application (existing shape) 100.00 for 1st hour then 100.00 an hour for each additional hour of review.

WSDOH Facility New Pool (for 20 by 40 new) 400.00 for 1st hour then 100.00 an hour for each additional hour of review.

Whatcom County Planning Review/permit fee: I spoke to Nick Smith- plans examiner he said 8-10,000. He also said it is unlikely that a land use review would be needed if work is done within the existing facility footprint. He did though say a Pre-Submittal meeting would need to be done to verify that.

Cost: Option 1 413,097.00

Tax 8.8% 36,352.53

Total 449,449.53

Terms: see page 5 terms

Pool Option 1 Options:

Option: Apply Stonescapes White Pebble Finish in lieu of white plaster finish. Add 17,350.00

Option: Install Levelor K1100 autofill Add 1,650.0

Note: potable water line feed with correct Double backflow protector not included.

Option: Install 1 Pentair Ultratemp 140 Heat Pump Add 7,657.00

Option: Install 2 Pentair Ultratemp 140 Heat Pumps Add 15,314.00

Note: Covering the existing pool shape is very difficult to manage, although it would save substantial energy costs

Please bring it up in our discussions.

Pool Option "2": New 20 by 40 pool- 4' to 5' 8" deep:

1. Build a 20 by 40 pool within the deep end of the existing 75ft. long pool. 20 ft. of the west end wall, and 40 ft. of the north wall will be used as part of the new 20 by 40 pool. Then a new 40ft. long straight south wall, and new 20ft. long east wall will be constructed to complete the 20 by 40 ft. rectangle. The depth will be 4ft. to 5' 8 "deep.
2. This pool will be 28,900 gallons. Targeted turnover rate = 110-120 GPM = 4.37-4.00 hour turnover rate.
3. 1 newly constructed 45 degree entry steps (SE corner) for pool entry (correct risers to meet code).

Option 2 equipment list changes:

- 1- Pentair 3hp XF Pump
- 2- 1-Pentair CCP 520 Filter with extra set of filter elements
- 3- 1-Raypac 406,000 BTU ASME LP Pool Heater with draft hood, B-Vent, roof jack and top cap.
- 4- Blue/white 3" flowmeter
- 5- 1- Pentair HC-3315 Chlorinator
- 6- 2- skimmer lines with separate 2" ball Valves
- 7- 1- new 3" main drain line with 3" ball valve
- 8- 2- New 8" Main Drains hydraulically balanced
- 9- 1 new 3' return line with 4- return inlets
- 10- 1 Elongated figure four handrail (at new entry steps).
- 11- 2 pairs Figure four handrails for insert steps
- 12- 2 sets of 3 insert steps in Deep end north and south wall

All other work descriptions are the same as Option 1, except construction will be for the new 20 ft. by 40 foot shape, so any items that reference areas outside new 20 by 40 shape are not included.

Cost: Option 2	381,347.00
8.8% Tax	33,588.53
Total	414,905.53

Pool Option 2 options:

In lieu of plaster, apply 2 coats of Stonescapes White Pebble Finish:	Add 9,450.00
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Install Levelor K1100 autofill	Add 1,650.00
Note: potable water line feed with correct Double backflow protector not included	
Pentair Ultratemp 140 heat pump	Add 7,657.00
Rocky Junior HD Reel (can be used for solar or Thermguard Cover)	Add 688.00
Rocky 4" HD Tube	Add 566.00
HD Solar Cover	Add 480.00
Thermguard 4.4 R Value insulated cover	Add 3,795.00

Terms: Once option 1 or 2 is selected, then all items from this quote will be merged into Hot Tubs Northwest, LLC Legal pool Contract.

Terms are:

10% of total contract to begin permit process

50% of total contract when work begins on site

70% of total contract when coping on pool is installed (pool prep, bond beam mudbed, and tile line completed)

95% of total contract when pool is plastered

Balance 7 Days later

Note: all concrete work is being quoted by Greg Blankers DBA Precision Concrete. See Option 1 drawing and Precisions quote:

All Fencing is quoted direct by NW Fence, see attached quotes option 1 & 2 and rental fence quote (required during construction).

Electrical Needs Pool Option 1 & 2:

- 13- New 100 amp service from main panel at Canopy to new equipment room
- 14- New exterior mounted 100 amp panel on north side of equipment room
- 15- Correct breakers, wiring, shut offs to pump, heater, and emergency shut off/contacter assembly
- 16- 8 Awg solid bond wire to all metal items (fence-rebar-handrail anchors) around pool and pool equipment.
- 17- Equipment Room electrical service receptacles and interior lighting.

Note: all electrical work new services etc. is being quoted by John Lohre DBA Lightning Electric or Banner Electric
They both feel 20,000.00 should do it but the Main panel needs to be unlocked to confirm amperage availability.

Note: heat pump options (1 or 2) if selected will add some costs to their base quote

Option 3:

I had run the option of a new smaller fiberglass pool by the board last spring, but it may be again worth considering.
15ft. wide by 37ft. long by 3ft 6 inch to 5ft. 4 inch deep Latham “Kingston” pool

This option with equipment sized accordingly would be:	335,520.00
Tax 8.8%	28,645.00
Total	354,166.68

Reels and covers options would be like Option 2

Facts: Currently you lose 85% of your heat loss through evaporative loss (no cover).

So, Cover options in Option 2 will save approximately 60% compared with option 1.

Fact: heating the pool with a heat pump versus propane will save an additional 60 %

Number of bathers allowed per WADOH code:

Original pool 75ft long option 1:	115 users
Option 2: 20 by 40 pool 4ft to 5ft 8” dp.	48 users
Option 3: 15ft. by 37ft by 3ft. to 5’ 4”	35 users

Fact: the existing expansive concrete decks and accompanying lineal ft. of fence could be reduced in size on all 3 pool options for Concrete and Fence quotes.

Example typical concrete on a 20 by 40 pool would be 6ft. on 3 sides and 12ft, on the 4th long side, then simple smaller walkways could be poured to link existing bathroom facilities and pool equipment room to the main pool area.

Fact: a 5ft. fence does meet the current WSDOH fence code so reducing the 6ft. fence quote height 1ft. can save money.

Fact: the Option 2 quote is based on using the existing shape on 2 sides and straightening 1 long wall to thereby accommodate either Solar or Thermguard cover options thereby reducing the yearly heating costs substantially.

Note: this does then leave the new 20 by 40 pool at 4ft to 5’ 8’ deep

Another option could be done to “center” the new 20 by 40 pool (within the original shape) this would add costs to shotcrete/build additional northside wall footage. It would though shallow up the new pool to 3ft. 6” to 5ft. deep.