

Project: New Spa Project Initial Outline Specifications

Owner: City of Lafayette

This document's outline is intended to describe the work for the construction of a whirlpool or spa for the above referenced project. This document will serve as a means of communication between the various parties involved in this project: designer, City, user & contractor. This document will be the basis for the cost estimate effort being conducted by a cost authority and/or construction manager for the items being described herein. Changes to the standards will not be allowed, but if the contractor has cost-effective substitutions of products and systems, such items will be considered only if it is proven to be equivalent or better than those specified herein. Any changes must be preapproved by the designer/owner prior to submitting cost estimate. City to provide information for soils or service conditions for the construction of the outlined work.

SPA OR WHIRLPOOL CONSTRUCTION

Work to be accomplished by Spa or Whirlpool Contractor:

- Excavation and sub-grade installation.
- Subsurface drainage with inspection standpipe. Provide concrete or gunite shell for spa. Verify any special conditions in soil and refer to structural recommendations for soils engineer for project. Expansive soils can be a concern in Colorado and appropriate design may have to be made to protect the shell from moving.
- Shell, underground, and mechanical equipment room plumbing which includes: drains, skimmers, inlets, jets, valves, and other plumbed features to the spa. All plumbing installed must be sized correctly according to the velocities and other requirements per code.
- Complete filtration with: a pump system, sand filtration, natural gas heating system, and chemical system.
- Complete jet system with: pump, valves, jets, jets and air plumbing, and drains.
- Virginia Graeme Baker Act Approved frame, grates, and sumps.
- Automatic water analyzer with chlorine and pH control for system.
- Provide and install underwater lighting in pool (optional).
- Automatic water level control. Fresh water supply piping and backflow preventer by others.
- Provide and install deck, maintenance, lifeguard and safety equipment as required by code.
- Provide and install handicap lift anchors and electric lift for ADA access.
- "No Diving" and Depth Markings on deck and pool walls per State Code.
- Interior finishes of the spa is to be glazed ceramic mosaic waterline tile and C701 handhold with fully tiled interior. Tile to be frost-proof and colors TBD but price tile to be color in the mid price range. Dal Tile or American Olean
- Steps and bench edges to have 2" contrasting color.
- Handrails shall be 1.5"Ø, 316L stainless steel. Hartford loops shall be 3"Ø, 304 stainless steel.
- Low voltage wiring to pool equipment by spa contractor.
- Start up, balance, and operational instructions.
- Water quality testing and pool operational equipment.
- Water balance and 1 month chemical supply.
- Minimum of 5 years commercial construction experience.
- State and County board of Health approved construction permit.
- Contractor to provide drawings for review by Building Departments or other Regulatory Agencies as needed.
- All construction shall follow the current Colorado Health Department Rules and Regulations for Swimming Pools. Also, schedule all required inspections for bonding and other electrical, piping, boiler, and mechanical inspections.

Work to be accomplished by Electrical Contractor:

- Bonding of spa and deck equipment.
- Connect equipment.
- Provide starters and disconnects.
- Connect lights at junction boxes.
- Emergency shut off switch located adjacent to pool. Spa circulation and jet pump to be interlocked when the shut off is pressed, both pumps should shut down.

Work to be accomplished by Mechanical Contractor:

- Furnish and install gas piping.
- Venting and combustion air to room and to heater.
- Sanitary connections for backwash. Backwash is around 110 GPM for five minutes and sanitary line should handle that flow by gravity.
- Domestic fill water to pool mechanical area and hose bibs.

Work to be accomplished by General Contractor: (if applicable)

- Provide steel reinforced concrete deck, deck drainage (trench drains), and structural work.
- Excavation, demolition, and removal of excavated soils required to prepare site and backfill if required.
- If Spa Contractor is responsible for excavation, the contractor will also be responsible for removing the spoils from the property.
- Obtain local building permit.

Spa or Whirlpool

Surface Area:	209 SF
Dimensions:	16'-0" x 13'-6"
Water temperature:	103°
Water Depths	3'-3"
Gallons	3702 Gallons
Turn Over (complete):	30 min. by code
Turn Over Rate:	200 GPM
Turn Over Time:	18.5 minutes
Filtration Rate:	14.2 GPM/S.F.
Backwash Rate:	15 GPM/SF; 106 GPM
Total Filter Area Sand:	14.12 S.F.
Filter:	Sand with 15 GPM/SF filter rate, 15 GPM/S.F. backwash rate.
Heater:	1 - Natural gas heaters, 400,000 BTU
Skimmers:	4-Skimmers
Additional features:	Glazed tiled waterline, fully tiled interior and wall top, contrasting edges on bench and steps, handrails, 17 jets and pump system, VGBA drains, ADA electric lift, center bench area, perimeter bench, concrete shell, chemical system, circulation system, and auto fill.

Warranty Requirements:

- Interior finishes - 2 years
- Pool equipment - 2 years
- Pool structure - 5 years
- Pool Mechanical Room Requirements:
- Electrical (each) 100 amps 460v 3Ø and 100 amps 120v 1Ø
- Vent (each): As required
- Domestic H2O (each): 80 GPM
- Sewage (each): 110 GPM by gravity
- Heat Capacity: 400,000 BTU's (gas heater)