

Greenhouse Design, Manufacturing & Construction

April 22, 2025

North Hardin High School Radcliff, KY

Quotation Number: ND25-KYNHHS-01

Thank you for the opportunity to provide a quotation for the greenhouse project located in Radcliff, KY. Stuppy is a family-owned greenhouse manufacturing company that began operations in 1873. We manufacture innovative designs that provide industry leading strength and value for our customers.

We are pleased to present the following proposal to provide engineering drawings for one 40' X 60' of CS3 greenhouse based on your recent request for quotation.

### Project Summary: Engineering Drawings for the following

#### • Structure:

- o (1) Block of (1) houses 40' X 60' CS3
- Note: Dimensions are center to center of greenhouse columns. For outside dimensions or for concrete details contact Stuppy for details. Do not install foundation prior to final greenhouse design.
- Sidewall Height: 10'
- Columns will be mounted to existing concrete slab. Base plate reactions will be provided for specifc foundation, kneewall or slab installation. Foundation should not be built until this information has been provided.
- o Code Design: Structure will be designed to meet your local building code.
- Additional Structural Information:
  - Columns: 2"x4" rectangle 1/4 wall hot dipped galvanized with baseplates
  - 12' column spacing
  - 12' truss spacing
  - Top Chord: 3" x 2" rectangle galvanized steel 15 gauge
  - Bottom Chords: 3" x 2" rectangle galvanized steel 15 gauge
  - Truss design: 1.5" square galvanized steel web member (6) with 1.5" kickbraces from trusses to columns. Roof pitch 6:12.
  - Roof Purlin: 3" x 2" rectangle galvanized steel 15 gauge
  - Bottom Purlin (on Bottom Chord): 1.315" o.d. round galvanized steel 16 gauge Quantity 2



- Aluminum Gutter(s)-Downspout outlet included; PVC pipe to grade included; Splashblock included
- Endwalls: (2 each) 3" x 2" rectangle galvanized steel endwall packages

#### Doors:

To include 1 ea. 42" x 6'8" and 1 ea. 42" x 6'8" double door. Insulated steel doors with window, lever lockset, and automatic door closers. Doors are ADA approved and include locksets. Advise of any key lock requirements (change order may be required)

#### Heating Equipment:

- o (2) PTP150S 150,000 BTU/HR input Stainless Steel Heater.
- o Fuel Type: Choose an item. (SPECIFY)
- o Temperature Differential: 70
- o Heater Hangers: Included
- Heater Stacking: Included Piping to exit on endwall. Stuppy doesn't recommend roof penetration.
- Heater Specifications: Heater is equipped with stainless steel exchangers and burners as well as intermittent pilot and power vent. Includes heater hanger kit and single wall vent pipe for heater.

#### Ventilation:

- (3) AL-48K American Coolair Aluminum 48" ¾ hp exhaust fan. Fan includes rotary belt tensioner, shutter side guard and exterior guard for safety. (2 each) 1 speed 115v single phase and a 2 speed 115v single phase
- LRW39E 39" Aluminum motorized inlet shutter 115v single phase.
- 4' x 35' rack and pinion exterior motorized vent. Powered by a Wadsworth VC-2000a Ils/Lst vent motor.
- 4' x 35' x 6" Open Top PVC Self Supporting Evaporative Cooling System. Includes submersible pump and all necessary hardware. Exterior tank is not required.
- Air Circulation: Acme 20" HAF fan (2 each)

#### • Environmental Controls:



- To be a Wadsworth StepUp environmental controller. Unit is supplied with contactors, relays, wiring diagram and shielded temperature sensor.
- o Programming and training of controller is included.

#### Covering Material:

- o Roof Covering: 8mm Clear Twinwall Polycarbonate covering.
- Sidewall Covering: 8mm Clear Twinwall Polycarbonate covering.
- o Endwall Covering: 8mm Clear Twinwall Polycarbonate covering.

#### Benches:

- Benches: To be two (2) 3' wide x 72' long benches and three (3) 6' wide x 72' long benches. Above ground benches.
- Bench framing is 1.5" square on posts, bench rail is 1.315 galvanized steel with aluminum perimeter extrusion. Bench top cross bars are spaced 2' on center.
   Bench top is Durabench plastic bench tops. Above ground benches
- Two 20' long Hydroponic Bucket System Bench with a 20 bucket hydroponic system complete with reservoir, pump and controller.

#### o <u>Irrigation System:</u>

- Irrigation system to include a 9-zone irrigation controller and a Dosmatic Superdos 30 fertilizer injector. To have 5 zones of irrigation on benches and to include overhead misters.
- o Includes all PVC, brass high-pressure regulator, filter, punch tool, manual valves,
- Include 8 runs of 60' long hanging basket rail (2 zone). 1-3/8 diameter steel pipe with hardware.
- Includes one propagation zone.

#### Aluminum Extrusions & Accessories:

Aluminum extrusions for roof, sides, & endwalls are included. Also, includes
 Aluminum baseboard for sides & ends. Includes hardware, flashings & sealants.

#### Drawings:

(3) Sets of stamped engineer prints for the state of Kentucky will be provided

#### • Site Preparation:

- General Contractor or Owner is responsible for site preparation
- It will be the responsibility of the owner to ensure that the pad site is elevated enough to allow for proper drainage. Stuppy will not raise or lower the pad site.



- Stuppy will provide the labor and materials to set posts (includes anchor bolts & epoxy).
- It is the responsibility of the owner/contractor to have all utilities marked prior to commencement of installation.

#### Concrete Slab Erection

 Stuppy is not responsible for installing concrete slab. The covering will terminate at the edge of the slab into Stuppy's 1001 girt. Does not include 5" x 36' long trench drain. Daylight of drain by others.

#### Greenhouse Erection:

- Frame Erection: Stuppy will provide the labor to erect complete the frame of the greenhouse structure. This includes, but is not limited to mounting columns, erecting and hanging all trusses, erecting and hanging all end wall framing, side wall framing and all equipment.
- Covering: Stuppy will provide the labor to install the 8mm Twin-Wall Polycarbonate covering and all necessary accessories.
- Equipment: Stuppy will provide the labor to hang all of the greenhouse materials & equipment and any associated materials that are necessary for the hanging of the materials & equipment.

#### Utilities

- Electrical Stuppy is not responsible for interior wiring of greenhouse equipment.
   Final connection into the greenhouse electrical panel by others. Low voltage control wiring by others. The electrical installer is required to mount greenhouse controller and motor controller as needed. Additional framing or Unistrut used to mount controllers is not included. Supply and installation of grounding rod and ground wire by others.
- Water The owner/general contractor will be responsible for making the water line connections from the supply to greenhouse at cooling system and/or irrigation system. Backflow preventer/Pressure Regulator Valve by Others. Required supply is 1" pvc with 50 psi at greenhouse for proper operation.
- Wiring diagram for greenhouse equipment will be included.
- Gas Stuppy will <u>not</u> supply the materials for and installation of the gas lines and regulators inside the greenhouse. The owner/others will be responsible for making the gas line connections from the supply to greenhouse.
- The final utility connections must be made within (3) weeks from the date of substantial completion of Stuppy's scope of work. It is extremely important that



the equipment in the greenhouse is up and running as soon as possible. The temperatures and environment in the greenhouse could have negative effects on the equipment. If connections are not made within that timeframe, Stuppy will not be responsible for malfunctioning equipment.

#### **GENERAL:**

- Wages: Wage rates are based on non-prevailing wage rates. If prevailing wage rates are required, a change order will be issued to cover the additional labor costs.
- **Trailer Drop:** A trailer drop will be utilized on this project. A storage site within 50' of the jobsite must be provided to Stuppy to store the trailer. The erection crew will work out of the trailer and store materials in the trailer.
- **Utility Location:** Utility locations will be marked on the jobsite prior to installation. Stuppy will not be responsible for damage done to unmarked utilities.
- Bonds: Bonds are not included in this proposal. Stuppy can provide the general contractor
  or owner with a performance and payment bond upon request with the approval of a
  change order issued by Stuppy.
- Inspections: Inspections of any kind are not included in this bid proposal.
- Erosion Control: Erosion control of any kind is not included in this bid proposal.
- Supply of and labor to install backflow preventers, cleanouts and/or interceptors is not included.
- Stuppy's bid proposal does not include money for background checks or drug testing. If
  background checks or drug testing is required, a change order will be issued to the general
  contractor by Stuppy for the cost of the background checks and/or drug tests plus any
  additional monies needed to obtain the background checks and/or drug tests such as
  travel costs.

## **Additional Installation Terms**

#### 1. FOUNDATION:

- Masonry or foundation installation shall not be constructed prior to approval of the greenhouse drawings.
- b. The site shall be prepared with normal load bearing soils (Class 4 Soils), free from rock or any other obstructions.
- c. Grade is based on no more than 2" fall per 50'.
- d. Additional costs or delays incurred due to conditions outside these limits shall be the responsibility of the buyer.
  - i. Base bid excludes soil testing, additional boring or additional piers, the removal or blasting of rock and improvement to the sub-soil. If these



conditions are encountered, the additional expense will require a change order.

- e. Any back fill using gravel or rock requiring the use of sonotubes or other materials may result in re-design, re-engineering fees and/or delays.
- 2. LICENSING: Stuppy is a non-licensed contractor in the state of Kentucky
- 3. WAGE DETERMINATION: Installation is based on non-union non-prevailing wages.
- 4. **PERMITS AND FEES:** Stuppy will not assume responsibility for permits, fees, inspections licenses and subcontracting of other trades necessary for completion of greenhouse.
- 5. DRAINAGE: By others
  - a. Provisions should be made for proper drainage, including greenhouse gutters or downspouts if provided.
  - Stuppy will provide gutter sections with flange opening for internal or external gutter drainage (if applicable). Location of gutter flange openings will be shown on greenhouse drawings.
- 6. ROOF PENETRATION: Not recommended.
- 7. UTILITIES: Water, electrical and gas supply lines shall be brought within ten feet of the greenhouse site to allow construction crew to be able to operate necessary tools and equipment. Electrical (115-volt grounded receptacle-20amp outlet minimum) and water (1" supply, 50 psi minimum) should be in place prior to crew arrival. Failure by owner or general contractor to have operational construction service available will result in a change order.
  - a. It is the responsibility of the Owner to provide and install a back-flow preventer and pressure regulating device before irrigation lines are installed.
    - Stuppy, Inc. takes no responsibility for damage to irrigation system should these items not be properly installed.
- 8. **SITE SECURITY:** A secure location must be made available to store materials within One hundred feet of the construction site.
- 9. **INSURANCE:** Certificates of insurance are available upon request.
- 10. DUMPSTER AND PORTABLE RESTROOM: Provided by Owner or General Contractor.
- 11. **SITE ACCESS:** Stuppy requires access to job site Monday through Sunday from 7:00 a.m. to 8:00 p.m.
- 12. **AUTHORIZATION TO DIG:** Owner or General Contractor are responsible for contacting utility companies for proper marking of all utility lines prior to arrival of the construction crews. Stuppy will not be responsible for any damage done to the following:
  - a. Underground Utilities (Electrical, gas, sprinkler, cables, etc.)
  - b. Landscaping
  - c. Sidewalks
  - d. Driveways

# Stuppy Greenhouse Design, Manufacturing & Construction

- e. Stuppy will not remove any excess dirt, sand, rocks, or concrete from your property unless stated in a contract agreement for the repair or construction that is being made.
- 13. **WALK THROUGH:** A preliminary walk thru and final inspection shall be required prior to erection crew's departure. A twenty-four-hour notice will be given to the owner. An authorized Owner's agent shall be present. The final punch list shall be prepared after the preliminary walk through. Upon completion of work discovered during the preliminary walk through, a final inspection shall be performed.
- 14. Start-up of equipment must be completed by a licensed electrician or HVAC technician.
- 15. Stamped MEP's are NOT included (if required).
- 16. Includes daily site cleanup
- 17. Structural and/or Covering changes required due to building code compliance may result in additional costs.
- 18. For baseplated columns that bolt down to concrete foundation the greenhouse structure is designed to meet the governing building code adopted by the Authority Having Jurisdiction (AHJ). The drawings and calculations of the primary structural components of the greenhouse will be sealed by a licensed professional engineer. The engineer designing the greenhouse structure is considered a delegated design engineer and is not the Engineer-of-Record (EOR) for the project. The design of the concrete foundation and concrete anchor bolt embedment is specifically excluded from this proposal and should be provided by the EOR for the project. Reactions will be provided for the EOR to complete the foundation drawings. However, for pier supported greenhouses, the greenhouse engineer may be considered the EOR.



### **Terms and Conditions**

- 1. **FREIGHT:** Freight is included. 28' ABF Storage Trailer provided for 60 days during installation. If additional time is required, it is billable (change order) at \$225 per week.
- 2. VALIDITY: 60 Days. Shipment within 120 days of order activation.
- 3. **SCHEDULE:** A schedule will be issued upon receipt of executed contract or letter of intent. Submittal approval will also affect scheduling and lead times.
- 4. **CHANGES:** Changes in engineering details of any order which may be requested after approval drawings or after fabrication commences are subject to engineering charges and to factory charges on in-process work already completed and affected by the change.
- 5. **CANCELLATION:** In the event of cancellation for products which are to be specifically constructed or adapted for use, the buyer agrees that cancellation shall be confirmed in writing. The buyer shall reimburse Stuppy for actual costs and damages incurred, including, but not limited to engineering, fabrication and restocking expense.
- 6. WARRANTY: Stuppy Standard One Year Material Warranty Applies. The buyer assumes all risks and liability for results of use of the products. Buyer's sole remedy and exclusive remedy against Stuppy shall be for the replacement of defective parts. Labor is excluded. Warranties expressed or implied on purchased parts such as electric motors, pumps and controllers are limited to the terms of the warranty extended by the manufacturer. Stuppy assumes no obligation or liability due to any recommendations, opinions, or advice as to the choice, installation or use of products. Any such recommendations, opinions, or advice are given and shall be accepted at the buyer's risk and shall not constitute any warranty or guarantee of such products or their performance.
- 7. **NON-PAYMENT:** If the buyer fails to make payments to Stuppy in accordance with this agreement, such failure shall be considered substantial nonperformance and cause for termination; or at Stuppy's option, cause for suspension of material deliveries and/or work. In the event of a suspension of deliveries or work, Stuppy shall have no liability to the buyer for delay or damage caused because of such suspension. Before resuming deliveries and work Stuppy shall be paid all sums due prior to the suspension and any expenses incurred in the interruption and/or resumption of deliveries or work.
- 8. **STORAGE:** Customer requested delayed shipment after materials have been manufactured/packaged and the shipment date is pushed back an excessive amount of time (greater than four weeks). A storage fee of \$200 per week for each week storage is provided either at Stuppy, a consigned trailer either at Stuppy Inc or another location at the customer's request.

## Stuppy Greenhouse Design, Manufacturing & Construction

- 9. **TERMINATION:** This agreement may be terminated by either party upon not less than seven days written notice, should either party fail to substantially perform in accordance with the terms of this agreement through no fault of the party initiating the termination. In the event of termination not the fault of Stuppy, Stuppy shall be compensated for all materials and work performed prior to termination, together with expenses plus profit directly attributed to the termination.
- 10. **INDEMNIFICATION:** To the fullest extent permitted by law Stuppy, Inc. and the buyer agree to mutually indemnify and hold harmless from and against any liability costs, damages, or expenses arising from the failure of Stuppy, or buyer to perform or comply with any provisions or requirements of their respective work of the project.
- 11. **CLAIMS:** Claims by either party must be submitted within 21 days after occurrence of the event. Written notice shall be given for claims for money, time and injury or damage to personal property.
- 12. Stuppy nor its agent shall be held liable for any claims verbal, written or digital content that have estimated or expected expenses, revenue, plant growth or output.
- 13. **CONSEQUENTIAL DAMAGES:** Stuppy, Inc. and the buyer shall waive claims against each other for consequential damages arising out of or relating to the proposal/contract.
- 14. RETURNED GOODS: Products must receive written permission prior to return. Goods returned which were shipped as ordered and are without manufacturing defect will be subject to a 15% handling charge in addition to whatever expense may be necessary to restore them to salable condition. Transportation charges on goods returned must be prepaid. Only products of current design and in salable condition will be considered for credit.
- 15. Due to supply chain interruptions caused by COVID-19, materials pricing and availability are volatile. Stuppy reserves the right to reprice this quote at the time of activation. Delivery dates are subject to material availability and supplier lead times. In the event of materials increases over 10% Stuppy reserves the right to renegotiate or suspend the order.



Greenhouse Design, Manufacturing & Construction

## **Pricing**

Thank you again for the opportunity to provide this proposal. Please contact Neil Devaney at 803-760-8847 or ndevaney@stuppy.com if we can help in any way.

Should you choose all options above your signature below will execute this proposal and serve as the contract for the sum of:

## **Three Thousand Five Hundred Dollars**

Engineering Drawings \$3,500.00

Sales Tax (Enter Sales Tax Rate%) - \$exempt

TOTAL: \$3,500.00

MATERIALS PAYMENT TERMS: School Purchase Order to process. Balance due at delivery TAXES: Taxes are NOT included in the pricing above. Owner is responsible for all taxes that apply.

Acknowledged and Accepted:

By: W

Date: