

SO YOU WANT TO BUILD A GREENHOUSE...

A White Paper for CA Ag Teachers

By Eric Dyer and Jerry Delsol, Woodland High School

Basic Info

-Woodland has 40 internationally based seed research stations and sales companies.

-Our Advisory Committee, Administration and Facilities Personnel have worked almost 9 years to accomplish this task

-We need a need Greenhouse/horticulture lab

Problem— No one really has a good concept of how to negotiate all the educational and legal requirements to build a greenhouse or barn on school sites. One greenhouse manufacturer lost over \$600,000 on a project because the rules were not followed and we became the proving ground

Part 1 — get everyone's commitment and approval in advance

Part 2 — Identify site, utilities - gas, water, elect, sun patterns, etc

Part 3 — Identify your pathway courses and your curricular needs.

Part 4 — Create a design plan, doors, benches, storage, etc.

Part 5 — Call a greenhouse company

Agratech	925-432-3399	Piedmont CA
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International Greenhouse Company (IGC)		
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	888-608-4451	West Sac CA
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Conelly	855-261-4142	Montclair CA
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Others do exist.

- I do not recommend you rebuild a donated unit
- Ag Con Construction is the best contractor. 408-279-9922

- These groups provide the cost of materials based only on what you tell them. After you add utilities and labor, it should be estimated a minimum of 6 times that! Sticker shock? Yup

Part 6 — Get the “School Farm Lab Facilities Exempt From Field Act” Ca Ed Code 17287. Have the district’s legal counsel write a letter stating that the greenhouse/ barn is NOT your regular classroom, maybe 5 sentences.

Part 7 — Select an architect

Part 8 — Request a construction plan from your manufacture

Part 9 — The architect will need about 3 months to get documents prepared for DSA approval for Handicap/ADA Access. This is the ONLY approval needed/ requested

Part 10 — Architect takes documents to Department of State Architect (DSA). This is why you do not need local building permits. This can take 3-4 months.

Part 11 — The architect will provide bids and a construction supervision company. READ Carefully. They WILL overprice their bids. Use your advisory committee

Yes you MUST pay prevailing wages unless it is all volunteer.

Part 12 — Get approvals and money together.

Part 13 — Order away and get your bids out.

Part 14 — Have it built for you. You will not get it right and you’ll loose the educational value

Part 15 — CELEBRATE and write a lot of thank you letters

FAQ's— Legitimate obstacles and concerns

- You Facilities person has never built a greenhouse or barn before and is unaware of the legal/ real building realities
- To use CTEIG funds, you must have real numbers. Perkins funds may not be used for building purposes
- You must have a quality advisory committee and admin team. You also need a legit pathway
- You will get sticker shock and time frustration
- You will want to give up. You are a classroom instructor, let the specialists do their work
- You will have 1000's of questions. Get them answered in writing
- Reach out
- Yes kids can do a lot of the work, reality says you'll do most
- We are greenhouse/ horticulture teachers. We need to work together

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Our Greenhouse History

2010- Started examining our facilities for energy efficiency

2013- Arson took out a portion of our lab

Facilities Director said we could rebuild but he didn't have any money

2014- Got amazing admin team who said "get it done"

2014/5- wrote a LOT of grants

CRAECPC = \$65K

Site= \$35K

CTEIG= \$225K

Community \$200K. Total \$525K

2016- received construction Docs

2017-

Feb met with Architect

May Architects docs received

June Docs submitted to DSA

Nov Final approval from DSA

2018

Feb Board approved Expenditure for structure

Apr Board Approved Expenditure for contractor

May More grants

June Steel Arrived

June Demolition occurred

July Site Prep

July Construction begins

Sept Construction done

Nov Open house

2019

Jan First Crop Expected