



Reflection on Quality Criteria

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1. Curriculum & Instruction

1A. The curriculum includes the components required under Section 52454 of the Education Code: organized classes in the study of agriculture science and technology; student supervised agricultural experience; and a program of leadership, organization and personal development.

The following classes are offered in Arvin High school ag program. Two floriculture courses, two botany courses, plants and soil science, ag business, beginning ag mechanics, ag science 1, ag science 2, and ag science 3. All courses incorporate career exploration, FFA leadership, and resume and portfolio development.

Students maintain FFA recordbooks for their SAE projects. SAE projects are conducted on the Arvin High school forty acre farm after school, weekends, and holiday breaks. These projects include; swine, sheep, beef, poultry, cover crops, and horticulture. Students are encouraged to complete proficiency applications of their SAE projects.

I currently teach two classes of floriculture, one class of plants and soils, and one class of marketing and sales. This pathway is tied to our California Partnership Academy. The floriculture curriculum includes theory and design, flowers and foliage, basic techniques and styles, beyond the basics, and the floral industry. Students conduct enrichment programs in our horticulture and greenhouse facility. This course is offered to sophomores.

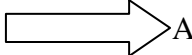
Students will learn theories, principles, and standards related to environmental horticulture sciences. Curriculum focuses on sustainable organic farming and composting science. Course of study incorporate biological standards as it applies to environmental plant and soil science. Students will use investigative techniques to study aspects of the botanical world including plant anatomy and physiology, plant nutrition, plant genetics, plant reproduction and development, plant ecology, plant evolution, and plant taxonomy. This course is offered to juniors.

Marketing and sales curriculum includes a survey and basic understanding of the business of the agriculture industry with a specific emphasis on agriculture sales, marketing and advertising. It is an introduction to agriculture business and its impact on the agricultural producer, consumer and the food system, and how these concepts are applied to create, sell and market agriculture products. The management principles encountered in the day to day operation of an agricultural enterprise are stressed as they relate to the decision making process. Students will develop market products from school farm. This course is the capstone class for seniors.

1B. The Career Technical Education Model Curriculum Standards for the Agriculture and Natural Resources Industry Sector are the basis for content of courses offered. Curriculum addresses “Foundation and “Pathway” standards within the program pathway(s) and course sequences.

Upon my hiring at Arvin High school there was no clear pathway in agriculture. I taught beginning and advance ag mechanics in the same class and taught ag science 1,2,3,4 in the same class and students had many different academic levels and grades. Since then I have written several grants that has helped me to create one true pathway in Environmental Horticulture and we are still in the process of developing the other pathways all the while experiencing a turn over in administration every year for the past three years. We have never been able to acquire a true introductory freshman class and are currently having discussions with our new Vice Principal to correct this issue.

Environmental Horticulture Pathway

Floriculture  Plant and Soil Science  Ag Marketing and Sales

All courses incorporate California CTE standards and incorporate academic foundation standards; reading, writing, and mathematics.

1C. Career paths in agriculture have been identified and can be found on a chart or diagram in the Program Plan. (Foundation Standard 3.0)

Academy Courses:

	Academic 1	Academic 2	Academic 3	Academic 4 (optional)	CTE 1	CTE 2 (optional)
Grade 10:						
Course Title	Agriculture Botany	English 10 Or ELD 3/4	World History		Floral Culture	
Teacher	Richard Goodding	Malcolm Blacklock	Evelia Rodriguez		Donald Mills	
A-G	D-Lab Science	B-English	A-History		D-Lab Science	
Grade 11:						
Course Title	Chemistry	English 11 Or ELD 3/4	U.S. History		Plant & Soils	
Teacher	Chris Carrisalez	Rocio Cantu Carol Lee	Aleida Rojas		Donald Mills	
A-G	D-Lab Science	B-English	A-History		G-College Prep Elective	
Dual or Articulated Credit?					Articulated	
Grade 12:						
Course Title	AP Environmental Science or AP Geology	English 12 Or ELD 3/4	Government Economics		Ag Marketing & Sales	
Teacher	Stephen Grover	Rocio Cantu Carol Lee	James Brandon		Donald Mills	
A-G	D-Lab science	B-English	A-History		G-College Prep Elective	

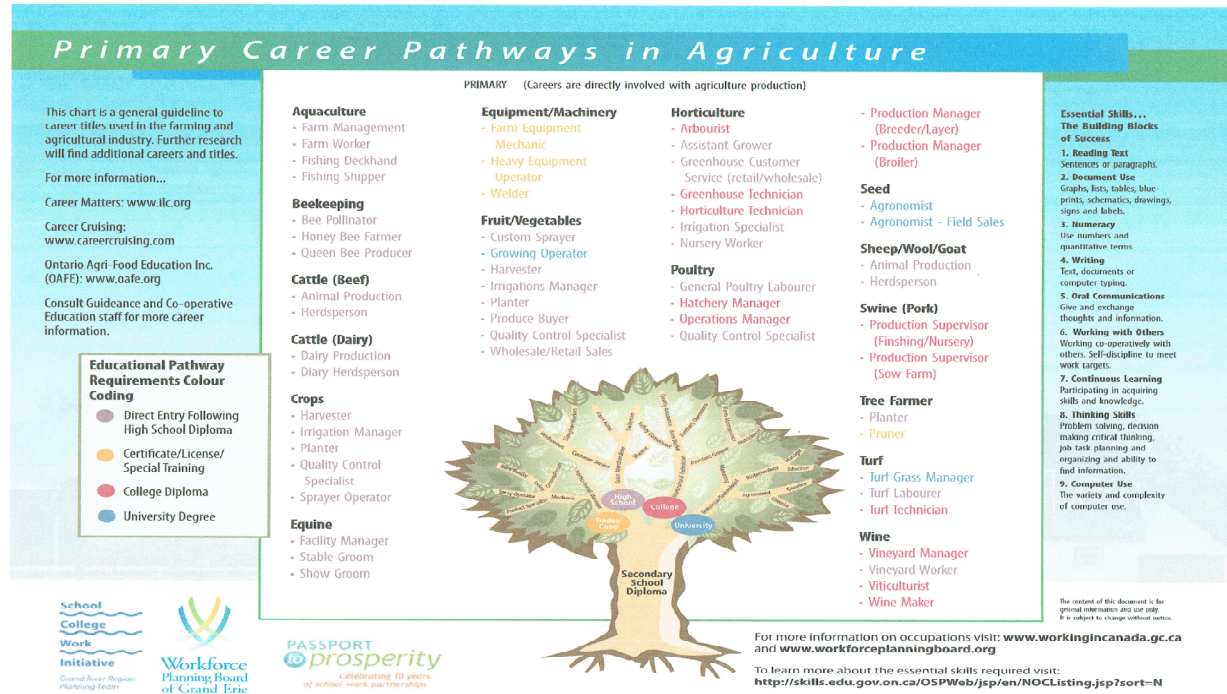
1D. The school master schedule allows students to follow the recommended sequence of agriculture courses to complete the selected career path(s).

Below is the master schedule upon my employment at Arvin High School. As you can see I was required to teach multiple subjects in a single period. The current master schedule above in 1C shows that I have been able to create one true pathway while acquiring a second teaching partner. We are currently working with administration to make two true pathways.

Callaway		47091A CDA	49091A CDA	69281A CDA		47091	47091	
	Ag. 9	Arch. Design 1(10)	Arch. Design 2 (11)	Engineering Graph (12)		Arch. Design 1	Arch. Design 1	Office Hour
		67881 A CDA	68521 A CDA	69521 A CDA		08098	08098	
Lemme	MA 3	Welding 1	Manufactu ring 2	Manufacturin g 3		Welding / ROP	Welding / ROP	Office Hour
		67901 A CDA	68901 A CDA	69901 A CDA		67901/68901	67901/689 01/69901	
McKinsey	MA 4	Wood 1 (10)	Wood 2 (11)	Wood 3 (12)		Wood 1, 2	Wood 1, 2, 3	Office Hour
			30541/325 41	56261/56261		30541/32541/3 4541/36541	55261/562 61	55261/ 56261
Mills	A- 10	Office Hour	Ag 1, 2	Ag Mech 1, 2		Ag Science 1 - 4	Ag Mech 1, 2	Ag Mech 1, 2
		67101	67101	07944			67101	07944
White	MA 1-2	Auto	Auto	Auto/Rop		Office Hour	Auto	Auto/R OP

1E. Agriculture Career Awareness information is included in every course. (FS 3.1, 3.2)

Every student in the Arvin Ag program receives the following career pathway list.



1F. The agriculture department utilizes computer hardware and software as an instructional tool. (FS 4.2, 4.6)

Arvin High Library includes a computer lab that is visited by the ag to complete record books, proficiencies, and career exploration. Each student on campus has their own email account and password. Students can save work to their personalized site to pull up at a later date at home or at school.

This year the ag program was able to secure funding for laptop computers that can be checked out by students for lab activities in the classroom. Students also come in to the ag classrooms to use class computers to complete coursework. The agriculture department utilizes computer software for gradebooks, roll call, and student records. In addition teachers are able to install the ag master calendar for reminders on their email account.

1G. The agriculture curriculum includes the use of computer aided instruction by utilizing at least one of the following:

Computerized Record Book

Agriculture Term Paper

Job Resume

Portfolio Letter of Introduction

Agriscience Fair Report

Agriculture/FFA Speech Manuscript

Job Cover Letter

Other Agriculture Related Project

Technology is used in the sophomore class to start their resumes and portfolios. Students that compete in the corresponding competitions utilize computer folders to save all work. Speech competition participants utilize computers to research speech topics, agricultural topics, and create cover letters. Computers are used to complete e-record books and fill out competition forms. Students become prolific in Microsoft word, excel, and powerpoint. They have also learned how to download activity photos to include in recordbooks and news paper articles. Currently the senior ag students are creating a economic food assignment in their Econ class.

1H. Recordkeeping is taught in all agriculture classes. Every student maintains and completes (closes out) either an actual SAE Project or Mock Problem. (FS 10.3, 11.0)

Incoming sophomore students are taught record book keeping by maintaining a hard copy FFA recordbook and input the information into the e-record book. They then store it on a flash drive that is provided by the ag department. If a student has not worked in the agricultural field they are offered an SAE project on our forty acre school farm. Students are also given the opportunity to do SAE projects in ag mechanics and in food science. After completing their e-record books students turn in their flash drives to the ag teacher where they are stored on the permanent hard drive of the school.

1I. Record books of all students are maintained in the Department files until one year following graduation.

As stated above the ag department saves all student record books on the school hard drive. The student's paper recordbook is kept in a file in the classroom for reference. Student's who continue their SAE into college have their record books kept for two years after their graduation.

1J. Agriculture courses have been submitted to meet high school graduation requirements and/or University of California a-g credit

Agriculture classes are submitted to the district every year thru our vice principal. He also updates accreditation with the UC system for our a-g courses. We currently have two courses in the agriculture program that receive a-g status, Botany and Floriculture. Botany student receive "D"- laboratory credit. Floriculture students receive "F"-visual and performing arts credit. The rest of the ag courses give students CTE elective units. At this time students must obtain forty of these units for graduation from high school.



2. Leadership & Citizenship Development

2A. An FFA chapter has been chartered by the State Association or has been applied for.

Arvin FFA was chartered from the beginning of the school opening, around 1949-1950.

2B.A chapter Program of Work is developed annually and a copy is furnished to the Regional Supervisor by December 15th.

Arvin High's FFA program of activities is completed each year during our officer retreat over the prior summer. Advisors work with chapter officers over a three day period to create an effective program of activities for our chapter members. Arvin FFA sets a goal to participate in all activities on the Ag incentive checklist. A copy is given to FFA officers, advisors, school site administration, and Charles Parker our current regional supervisor.

2C. Every student is given a grade based upon participation in leadership activities.

The Ag Ed instructor allows a maximum of 10% of the student's grade for his or her FFA activities. These grades are considered four times per year. Activities may include chapter meetings, judging teams, market animals or projects to be shown at the county fair, assisting in the completion of the chapter program of activities, and participation in chapter fundraisers.

2D. All students enrolled in agriculture classes are affiliated with the State FFA Association.

Ag students enrolled in Arvin ag courses are counted on the annual R2 report. Ag staff works together to input student data. The rooster is maintained for the year and students can be added or dropped depending on their enrollment status.

2E. Based on previous year's records, the department participated in a minimum of 12 activities as listed on the FFA Activities Check Sheet. (Attached)

ANNUAL FFA CHAPTER ACTIVITIES CHECK SHEET

Criteria 2e Year **2012-13** School **Arvin High School**

Must meet at least 12 areas

LEADERSHIP ACTIVITY	YES	NO
Attended State Leadership Conference	x	
Attended Regional Meeting	x	
Attended Regional Leadership Conference	x	
Attended Greenhand Conference	x	
Attended Made for Excellence Conference	x	
Attended Advanced Leadership Academy	x	
Attended Sacramento Experience		x
Participated in Opening-Closing Contest - Sectional	x	
Participated in Best Informed Contest - Sectional	x	
Participated in Parliamentary Pro Contests - Sectional		x
Participated in Prepared Public Speaking - Sectional	x	
Participated in Extemporaneous Speaking - Sectional	x	
Participated in Creed Recitation - Sectional	x	
Participated in Job Interview Contest - Sectional	x	
Participated in Agricultural COOP Quiz Contest - Sectional	x	
Submitted State FFA Degree Application	x	
Submitted American FFA Degree Application		x
Submitted Proficiency Application - Sectional or Regional	x	
Submitted Chapter Award Application - Sectional or Regional	x	
Participated in Project Competition - Sectional	na	
Participated in any FFA Judging Activity (other than above)	x	
Participated in any other FFA Sectional Activity	x	
Participated in Local Leadership Activities (3 maximum - list below)		
1 COLC	x	
2 Novice Record Book	x	
3 Banking Quiz	x	
TOTAL AREAS MET	21	

2F. A minimum of 80% of students participate in at least three leadership development activities annually as verified by department records. Activities could include any three of the following intra-curricular activities: (FS7.0, 9.1, 9.2, 9.3, 9.6, 10.1)

Local Best Informed Greenhand Contest	Local Creed Speaking Contest
Local Opening & Closing Contest	Local COOP Quiz Contest
Local Program of Work Committee(s)	Local Demonstration Fair
Local Agriscience Fair Exhibition	Local Public Speaking Contest
Local Parliamentary Procedure Contest	Chapter Meeting or Activity
Any Section, Region, or State Activity	Other Local Activities

While creating our program of activities we criteria 2F in mind the fact that we want help students reach the 80% participation requirement. Most students are able to attend three leadership activities in local, sectional, regional, or state FFA activities. Records are kept for each student in the districts synergy grade book for teachers.



3. Practical Application of Agricultural Skill

3A. Student participation in Supervised Agricultural Experience (SAE) is part of the grading criteria for every agriculture student in the program. (FS 10.2)

FFA is accepted as an integral part of the agricultural program by the Kern High School Board of Trustees. FFA is taught in conjunction with classroom information and supervised agricultural experience programs. Students enrolled in agriculture course work receive credit toward their grade for involvement in the SAE's. The FFA portion of the agriculture program helps to extend and reinforce the instructional program, give students practice in self-government, building morale and spirit for themselves, the school and community, honoring outstanding achievements and provide secular activities for students to participate in. Sophomores are required to complete an FFA record book as part of their grade.

3B. First year students have either been engaged in a SAE project(s) or have a plan in place for a SAE, as verified by the Student Data Career Plan. (FS 10.2, 10.3)

Arvin Ag department provides several SAE options for students; swine, cattle, poultry, goats, sheep, vegetable production, food processing, viticulture, floriculture, diversified livestock, diversified crops, ag mechanics, small animal care, and landscape management. Students are encouraged to choose an SAE by the end of their first year in the ag program. Students record their SAE choices on their four year career plan and are also encouraged to take advantage of the forty acre farm to conduct their SAE projects.

3C. A minimum of 80% of continuing students are engaged in SAE project(s) as verified by Department records. (FS 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0)

The Arvin ag department was able to reach 100% SAE participation of ag students enrolled in the academy thru food science and floriculture. All students prepared a food commodity or floral project for the 2014 Kern County Fair. Students prepared jams, baked goods, dried foods, canned foods, floral arrangements, cactus arrangements, hanging baskets, and potted plants. Arvin High was the most represented in Harvest Hall.

3D. Students with SAE projects are visited by their agriculture teacher at least twice per year as documented by Department records.

Arvin High Ag department is fortunate to have a forty acre farm that most students utilize for their SAE projects. Advisors are on the farm daily overseeing these projects. For students that do not have an SAE on the farm arrangements are made to visit at the student's convenience. These projects are usually visited more than two times per year so that students can be successful in the SAE project of their choice.

3E. a school vehicle is readily available to each agriculture teachers for all SAE activities associated with the program or each teacher is adequately compensated for using their own personal vehicle.

Arvin ag advisors have two four door trucks that have been assigned to the agriculture program. Advisors are allowed to use trucks as needed for student transportation or equipment pick up. The ag department is also able to request school buses and vans for activities in which numerous students attend. A transportation budget has been set by the district for the site and the ag department is issued a gas credit card to use as needed. As a result personal transportation is rarely needed and if so advisors use this credit card to provide gasoline in those cars.

At this time we do not put in for reimbursement of personal automobile use as it is not needed.



4. Qualified & Professional Personnel

4A. Every agriculture teacher has the appropriate credential for teaching the subject(s) assigned. Copy of authorizing credential(s) is in the Comprehensive Program Plan.

Both advisors hold appropriate credentials to teach assigned courses. I hold a designated subject credential in career technical education in agriculture and natural resources and district required CLAD credential. My teaching partner holds a single subject teaching credential in agriculture.

4B. Based on the previous year's records, every agriculture teacher, teaching at least ½ time agriculture, attends a minimum of four professional development activities: (Complete Attachment)

Professional Development	DONALD	JENNY
PLC (Professional Learning Communities) Meets Every Monday at 2:05	X	X
Fall Regional Meeting	X	X
Spring Regional Meeting	X	X
Staff In Service Days Mandatory 4 Site and 1 District	X	X
New Professional Institute		X
CATA Conference	X	X
CPA (California Partnership Academies) Conference	X	

4C. The agriculture staff meets a minimum of twice a month. (This criteria does not apply to single person departments-mark column N/A=Not Applicable)

The ag department has a central office that both staff members meet on a daily basis to discuss the week's activities. Weekly meetings are scheduled with fellow CTE teachers on Mondays. Monthly meetings are scheduled to discuss the ag academy with the other participating teachers. Advisors meet with chapter officers weekly on Mondays and plan chapter meetings quarterly for all ag students.

4D. A written record of minutes is kept of action taken during agriculture staff meetings and is kept in Department files or the Comprehensive Program Plan. (This criteria does not apply to single person departments-mark column N/A=Not Applicable)

PLC and academy meeting minutes are kept and filed for future reference. Department meetings are recorded on a white board and in emails. Students keep minutes for FFA meetings.

4E. Teachers are reimbursed for personal expenses they incur while participating in all approved integral activities associated with FFA, SAE, and professional CATA in-service activities.

Before being awarded the California Partnership Academy in ag I personally paid for my professional development and travel expenses as the program did not have the funds to reimburse me and I preferred to have the funds spent on the students and farm. Now that we have a successful ag advisory and academy, teachers can seek reimbursement thru different funding sources. This past year was the first CATA that was paid entirely by school funds. We usually try to pay for conferences thru PO's however food and lodging isn't always able to be paid in this manner until after the fact. In this case teachers are given a reimbursement form with their request to be absent. Teachers are usually reimbursed by the next pay period.



5. Facilities, Equipment, & Materials

5A. Modification of facilities and equipment has occurred when necessary, based on the needs of students, including special populations.

With the prop 1D grant all ag classrooms have been modified according to state standards. In the modification the state of California required classrooms to have pathways and doors that are large enough for wheelchair accessibility. I personally requested that overhead projectors be installed so all students can see schoolwork projected on a white screen. For overall student health a sealed floor and stainless steel tables and work areas had to be installed in the ag lab to accommodate food science curriculum.

5B. There is adequate storage space for materials, records, equipment, and supplies.

During the remodel of the ag classrooms built in locking cabinets were installed in the lab classroom for storage. Our locking tool shed in the ag mechanics classroom was remodeled with new shelving, a see thru window, and a locking door. Upon completion shelving was purchased to accommodate additional storage needs in the ag lab. In the ag office several file cabinets hold our student files, curriculum, and other necessary paperwork. On the school farm there is a locking tool shed, several out buildings and a seatrain for storage. This year the ag department plans to buy additional sea trains for more secure storage on the school fam.

5C. At least one of the below listed community or school-based laboratory facilities has been provided to accommodate students who have no place for their SAE project(s):

School Farm Laboratory

Greenhouse

Growing Area

Agriculture Shop

The Arvin Ag program is one of the few programs in the Kern County area to have a school farm. Students can just go a few feet out of the ag classrooms to access the forty acre school farm. The farm consists of a swine unit, sheep unit, beef unit, goat unit, and poultry unit. In the school growing area there are pomegranates, oranges, lemons, limes, tangerines, grapefruit, peaches, apricots, apples, walnuts, cherries, figs, and pecans. Adjacent to this area is the greenhouse where students start vegetables, flowers and succulents to plant in the growing area. The ag mechanic shop has been completely remodel and consists of MIG welders, stick welders, plasma table, TIG welder, iron workers, oxy acetylene station, plasma cutters, drill press station, and a wood shop with table saws, sanding tables, and other wood working equipment. The students are able to access to any of these facilities for their SAE projects.

5D. The Agriculture Department has E-mail capabilities.

All employees and students in the Kern High School District are assigned an email and password for their personal use. These email accounts can be accessed at any computer or phone that has internet capabilities.

5E. The reviewer verifies by visual observation that the agriculture facilities are neat, clean, and orderly.

Upon arriving to Arvin High the school farm was overgrown with weeds and the classrooms had not been cleaned out in years. Now Ag teachers and FFA students are responsible for the care of classrooms, labs, and school farm. Check lists are created for clean-up that students perform and teachers implement them. In food science sanitization is part of the curriculum and students must disinfect food preparation areas before and after use. The district provides the program with a farm manager who weeds, turn rows, and traps pests. They also provide a janitor who daily disposes of trash and sweep and mop floors.

5F. Facilities and equipment and regularly maintained, repaired, or replaced.

In years past maintenance and repairs fell on my shoulders as the farm was not high on the list of priorities for the site. With prop 1D money I had the irrigation on the farm replaced and updated. This grant also provided complete remodel of our ag mechanics shop and ag science lab. Electrical has been updated on the farm by the site for the past two years and is now only one barn away from being completed. The Arvin ag advisory holds farm clean up day where they gather with students to perform cleaning, painting, and other small repairs. The ag mechanics and ag science classes also help to regularly maintain the farm. Our equipment is maintained by the transportation department at the Kern High School District. Trucks and trailers and regularly scheduled for routine maintenance or repairs as needed.



6. Community, Business, and Industry Involvement

6A. The advisory committee is operational and reflects the committee membership as outline in the “Agricultural Education Advisory Committee Manual.”

The Arvin Ag Advisory was restructured in 2011. At that time new governing members where voted in and monthly meetings were set in place. Before this time no advisory minutes were on file in the ag department. Below is a list of our advisory members that are on file with the state.

ADVISORY BOARD FOR 2013-2014

<u>NAME</u>	<u>ADDRESS</u>	<u>JOB</u>
Maria Marroquin	203 Wooner Dr.	Alhely Flowers
Yolanda Pewitt	P.O. Box 416 Glenville, CA 93226	App Ranch
Darren Filkins	7200 E. Brundage Ln Bakersfield, CA 93307	Bolthouse Farms
Jason Pavletich	6308 Seven Seas Ave. Bakersfield, CA 93308	Pavletich Club Lambs
Mike Poncetta	10454 Wible Rd. Bakersfield, CA 93313	Poncetta Farms
Maria Gonzales	901 Paloma St. Bakersfield, CA 93304	Kern Human Resources
Tammy Mills	P.O. Box 82021 Bakersfield, CA 93380	Sub for Grimmway Farms
Nancy Amick	11218 Mt. View Rd. Bakersfield, CA 93307	Greenfield School District
Richard Amick	11218 Mt. View Rd. Bakersfield, CA 93307	Bolthouse Farms
Aarin Wilson	29736 Fresno Ave. Shafter, CA 93263	Wilson Ag Farms

6B. The Agriculture Advisory Committee meets at least twice each year. (Minutes are available to verify meetings).

The Arvin Ag advisory felt it is important to meet more than two times per year so they plan meetings one time a month on the second Thursday of every month except in July. All current FFA members, community members, parents, and Arvin High staff are invited to be present. Minutes are kept by the secretary, approved by the governing board, and signed by the president and vice-president. Minutes are provided to all board members and teaching staff. Additionally the are filed on the computer and signed copies are filed in a folder. A copy of two meetings is sent to the state with ag incentive grant request.

6C. The Agricultural Advisory has assisted in the development or revision of the following components of the Comprehensive Program Pan, as evidenced in the Ag Advisory minutes.

Job Market Description	Targeted Occupations
Total Program Goals & Objectives	Program Description-Courses, SAE, FFA
Course Subject Matter Outlines	Program Completion Standards
5 Year Facility & Equipment Acquisition	Current Year Budget
Graduate Follow Up	List of Active placement Sites

The Arvin High Ag program would not have been able to overcome the obstacles that were present when I was hired without the commitment and vision of the ag advisors. They continue to provide guidance, vision, and support for the betterment of our students. They have had meetings with community businesses, administration, and parents to help with program goals, curriculum, facilities, SAEs, and job placement. They organize farm work days to keep the farm in working order, assist in student recruitment, and help organize student field trips and FFA banquet. Our students and staff have been very blessed.

6D. The contact information of the Advisory Committee Chair has been provided on the cover of this checklist.

All advisory members are included in the ag incentive grant proposal. A copy is on file with Mr. Parker and at the school site. The president can be reached by phone or at the ag advisory email, arvinag@gmail.com.



7. Career Guidance

7A. Students are counseled regarding: (FS 3.0)

- **Career opportunities in Agriculture and Agribusiness**
- **Agriculture and academic courses needed to complete career pathway offerings**
- **Post Secondary education and training options.**

Arvin Ag students explore career opportunities in agriculture thru several types of interaction. They explore career opportunities with lectures, websites, and field trips to colleges, local ag businesses, FFA activities, mentors, and graduated students. At the school site we have a career guidance counselor; students are encouraged to visit the career guidance center to explore college and scholarship opportunities. Our campus hosts a college career exploration day where teaching staff is asked to showcase the career opportunities from the college they attended. Additionally agriculture students are counseled over their high school career to help them attain the skills that will help them obtain their chosen career choice and are introduced to the five agriculture colleges in California.

7B. All students have a completed career plan (Student Data Sheet) and it is updated annually.

Student data sheets are completed in the student's first year in the ag program. They are maintained and adjusted annually for each student. Agriculture teaching staff keep hard copies and give the students one copy to put in their personal file.

7C. Efforts have been made, or completed, to articulate with Community Colleges and/or Universities. (i.e., 2+2+2 articulation agreements)


I collaborate with Bakersfield College and the Kern Community College Consortium on articulated courses. Students complete forms thru CATMA to receive college credit from previously taken high school courses. Teachers must input student data in to the same system so students are recognized upon enrollment at the college. Upon enrollment students are automatically given course credit. Currently classes at Arvin High that are articulated are; plant and soil science, ag mechanics, and ag business.




8. Program Promotion

8A. An Agricultural Education program recruitment brochure or similar document is used to promote the program.


The Arvin Ag program has created several brochures over my tenure here. This is the latest Ag Department's brochure for disbursement.




COMMUNITY SERVICE
Arvin High School's agriculture students believe in community service. Students plan and organize 4 community service projects every year. Community service projects include Lamont Toys for Tots, Thanksgiving baskets for migrant families, Jameson Center for Foster Children, Christmas dinner baskets, school clean up projects, and school farm clean up days. Community service projects connect the agriculture program with the local community.



Building A Bright Future
With Today's Youth



SCHOOL FARM
Student learning takes place in classroom laboratories and the 40 acre school farm. Currently we produce alfalfa hay, house horticulture projects, and raise livestock on the grounds. The hay is used in the farm's livestock production and is sold throughout the local community. There is a variety of livestock including cattle, goats, sheep, swine, and poultry. Livestock is sold locally or to students to show at the Kern County Fair.



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AHS FFA Advisors
Donald Mills, Department Chair
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Richard Goodding
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Agriculture
Arvin High School

This pathway is open to all Arvin High School students and will not allow unlawful discrimination as described in federal and state laws.

Arvin High School Agriculture

Learning to Do,
Doing to Learn,
Earning to Live,
Living to Serve.



BLUE JACKETS
Bright Futures

AGRICULTURE PROGRAMS

- AGRISCIENCE 1-4
- ENVIRONMENTAL HORTICULTURE ACADEMY
- AGRICULTURE MECHANICS 1-4
- AFTER SCHOOL AG BEAR ADVANTAGE
- SUPERVISED AGRICULTURAL EXPERIENCE
- FFA LEADERSHIP
- EHA INTERNSHIPS
- COMMUNITY SERVICE PROJECTS



SUPERVISED AGRICULTURAL EXPERIENCE (SAE)
SAE Projects allows your student to sample and explore their agriculture interests. Student can plan, develop, and execute a business venture, livestock project, or one of many more agriculture based experiences. Students conduct these projects out of class with the advisement of the teacher and community.

CLASSROOM/INSTRUCTION
Agriculture curriculum is geared towards all levels of students. Students learn the latest skills, procedures, and practices need to enter college or the work force. Educators incorporate the latest strategies and methods to reach your student. The agriculture program offers enrichment programs and all classes meet graduation requirements. Program courses are articulated with Bakersfield College and are transferable to California state college. Floriculture and Botany are UC approved courses.

TRAVEL ~ SCHOLARSHIPS ~ FAIRS ~ CONFERENCES ~ COMPETITIONS ~ FAMILY ~ LEADERSHIP

FFA/LEADERSHIP

The National FFA Organization offers quality leadership training and a sense of family among members. Leadership training includes goal setting, communication skills, study skills, problem solving skills, critical thinking skills, time management skills, teamwork, motivation, and listening skills. Students that develop these skills have a jump start for a successful life in agriculture. The FFA philosophy of Learn by creates a self-aware and self-confident college-bound student or workforce employee. Leadership training in the FFA creates a bright future for its members.



8B. Students have alternative means of overcoming financial barriers to participate in program activities. (Includes FFA, SAE, Leadership Activities)

When I first hired at Arvin High my family and I donated funds to students who had financial barriers as the whole budget consisted of \$8000.00 of incentive grant and \$8000.00 in Perkins funds with outstanding bills of over \$5000.00 from the previous year. There was no livestock on the farm and the alfalfa field was full of weeds and stickers. Since that time our budget has improved thru incentive grant, prop 1D grant, prop 98 grant, community consortium grants, private donations, and solvency of the school farm thru the alfalfa field and livestock program. This has allows us to fund most student activities without payment from students as many would be unable to participate since we are at school in which over 90% of the student body is on free/reduced lunches. No student in the Arvin Ag program is excluded from FFA, SAE, or leadership activities due to financial barriers.

8C. The Agriculture Department conducts recruitment activities with local feeder schools.

I have always felt it is very important to reach out to our local feeder schools. Our recruitment activities with feeder schools consist of farm field days, community outreach projects, parent groups, freshman orientation night, and freshman preferencing. The ag department plans to continue on building on recruitment activities by introducing lesson plans that ag students will present to junior high and elementary students at their individual schools.



9. Program Accountability & Planning

9A. A Comprehensive Program Plan is on file with the Regional Supervisor and a copy is retained in the local department files.

Mr. Parker required us to send in a comprehensive program plan with our ag incentive grant request in order to meet criteria 12. It is on file with him and we keep electronic and paper copies for our records.

9B. Updates of the Program Plan are sent to the Regional Supervisor by November 15th. These updates include: (1) Five Year Equipment Acquisition Schedule, (2) Chart of Staff Responsibilities, (3) FFA Program of Work, (4) Advisory Committee Roster, and (5) Advisory Committee Minutes.

I take great pride in having any reports that are due to the state turned in on time. In our reports due to Charles Parker this year all the above items were included and can be verified by the state records.

9C. A follow-up system is used which gathers the following information from program

- **Status of employment or school enrolled within**
- **Opinion regarding the value and relevance of the agriculture program**
- **Suggestions for improving the program**

Currently our follow up system can use a revision as our system is usually informal conversations that we have with past students who are still involved with FFA. At this time our follow up system is being discussed with the ag advisory so we can obtain a more accurate synopsis of our graduated students. We are trying to streamline the process so it is less taxing on teaching staff and ag advisory. We are looking to collect emails and phone numbers to better follow up with past students with the questions above. At this time I do keep in touch of several past students and these items are discussed and their input helps our next generation of students.

9D. The Graduate Follow Up data collected was entered with the On-line R2/FFA Roster Data Entry by October 15th.

As this is a mandatory requirement the Arvin Ag Department must turn in by October 15th so that we do comply with this requirement. Our follow up data usually just goes thru the first year after graduation but in some cases two years are recorded on the R2/FFA roster.

9E. The Agriculture Department analyzes their student retention numbers each year and develops strategies to help increase retention within the program.

The Arvin Ag Department has always put retention high on the list of priorities. The EHA academy has allowed us to retain students from their sophomore thru senior years of high school. In many cases when students are enrolled in the elective courses of our ag program they re-enroll the following year.

At this time we are in discussions with administration on how to obtain a pure freshman class and create pathways for Ag mechanics and animal science that would carry students thru their senior year.

Our district has initiated a program in which students must choose their career pathway as an incoming freshman. This is promising for the ag program as it would assure retention in ag students.

9F. The R-2, AIG Expenditure Reports, and FFA Roster have been received by the Regional Supervisor and/or State FFA Coordinator on or before October 15th.

Mr. Goodding and I worked together with the students during class to fill out student data sheets for report on the R2 and FFA roster, I then gathered the information and inputed it at the state website. The AIG expenditure reports were also recorded by me and I reported them to the state by the required deadline.



10. Class Size

10A. Shop and laboratory-based classes have no more than 20 students enrolled. Classroom based classes have no more than 25 students enrolled.

I take great pride in the fact that we were able to reach criteria 10A last year for a boost in our ag incentive grant. Unfortunately we had a new administrator come in last year who did not comply with criteria 10A so our 2013-2014 class sizes will reflect high numbers. We are working on remedying the problem with the current administration so Arvin ag will once again meet this criteria.

10B. The total number of students enrolled in agriculture classes does not exceed 75 students per teacher. First year students enrolled in agriculture courses will be counted as .5 for purpose of determining the total count only.

Currently the Arvin Ag Department has two teachers with a total of 219 students. 139 of these students are first year members thus making the student to teacher ratio 75 to 1.



11. Full Year Employment

11A. A full-time equivalent teacher is employed year round for each 75 students enrolled in the agriculture program and is compensated no less than \$2000.

In the Kern High school district each ag teacher at the individual sites are given a summer stipend that covers SAE projects thus making us year round employees. The stipend is figured by 36 days x's your hourly rate. In my case I was paid \$48.00 an hour x's 8 hours a day x's 36 days, totaling \$13824.00 minus taxes. This was equivalent to two months of pay plus my 10 month regular contract thus totaling 12 months. My teaching partner was given the same formula for his summer contract.

11B. During the school year, one teaching period for supervision is assigned to each agriculture teacher. This project supervision period is in addition to the preparation period normally assigned to all teachers in the school. This requirement may also be met if a period is not available by financially compensating the agriculture teacher(s) at the equivalent cost of providing one period of supervision.

At our site only one agriculture teacher is given a period for project supervision. I receive two prep periods, one for project supervision and one for classroom preparation. This is something we would like to build on.



12. Program Achievement

12A. The Agriculture Program meets the requirements of Program Achievement. (attach checklist).

For the first time since I was employed as an Arvin ag teacher we qualified for this bonus. We will continue to strive for this goal and talk with community partners, administration, advisors, and parents to aid in this accomplishment.

**AGRICULTURAL CAREER TECHNICAL EDUCATION INCENTIVE GRANT
QUALITY CRITERION 12**

Agricultural programs meeting all of the required Quality Criteria (Criteria 1–9) and Criterion 12 may qualify for an additional \$7,500. This form along with the appropriate verification must be attached to the Agricultural Career Technical Education Incentive Grant Application. The Incentive Grant application is due in the Regional Supervisor's office on June 30, 2013.

Number of Students on Previous Year's R-2 Report: 178

12A Leadership and Citizenship Development

21 Number of activities on the approved FFA Activity list in which the local chapter participated (must participate in at least 80 percent of the activities)

12B Practical Application of Occupational Skills

10 Number of students who received the State FFA Degree (must be at least 5 percent of the R2 number)

12C Qualified and Professional Activities

2 Number of teachers who attended a minimum of five professional inservice activities (must attach approved Inservice Activities Verification Page)

12D Community, Business, and Industry Involvement

11 Number of meetings held by the local Agriculture Advisory Committee (must be at least three, with minutes attached)

Name of Agriculture Advisory Committee Chair: Maria Marroquin

Phone Number of Agriculture Advisory Committee Chair: (661) 379-1205

12E Retention

76 Number of students from the 2009 Freshman cohort who completed 3 or 4 years of Agriculture Education courses must be at least

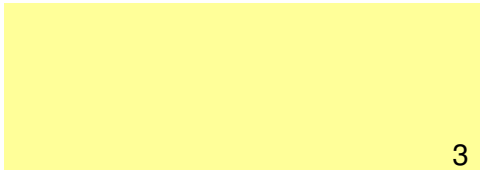


30% of the 2009 Freshman cohort

12F Graduate Follow-Up



Number of program completers
graduating last year



Number of those who graduated who are
employed in agriculture, in the military, or
continuing their education (must be at least 75
percent of the program completers). Attach
graduate follow-up report



Donald Mills

Arvin High Department Chair

Masters Project 2014

"How To Remodel Your Agriculture Facilities"

Index

- A. Introduction
- B. Advisory process
- C. Planning process
- D. Funding process
- E. Architecture/Design process
- F. Contracts/bidding process
- G. Final Remodel Walk Through
- H. Remodel pictures (before)
- I. Remodel pictures (after)
- J. Conclusion

A. Introduction

In this project I hope to explain the steps that one would have to take in remodeling an agriculture classroom and agriculture mechanics shop. The main points in this outline is to help new agriculture teachers that have just completed their teaching credential program and received their first teaching assignment only to realize they may not have a conducive environment suited for teaching needed skills our students will need to enter the work force or higher education.

In my case I was hired at a school to teach Agriculture science 1, 2, 3, and 4 plus teach an intro to ag mechanics and advanced ag mechanics class. The school was built in 1949 and I can attest that the classroom/shop I inherited had the same equipment that was originally installed then. Equipment was missing safety devices, dirty, tagged, or just did not work. The Facility was used as a storage room for the whole school for many years. Students were unable to safely move about the class or operate most of the equipment. I quickly tried to access what equipment I could salvage, what equipment was a loss cause, and cleanup the facility. I was able to repair some equipment and utilize Perkins funding to piece together some resemblance of an Ag mechanic shop. I was visited shortly thereafter by the teacher that left for greener pastures and he replied I was making him look bad! I took that as a compliment.

As for the agriculture classroom that I needed to teach ag science in there wasn't one I had to teach FFA, Horticulture science, Livestock science, and ag mechanics all in one environment plus having over 40 students enrolled in each class. You can probably already see the safety issues compiling. Unfortunately talking with fellow ag teachers up and down the state this is not an uncommon situation for many. I did not allow this to discourage me but I was frustrated on a weekly basis.

As ag teachers we entered a profession knowing we would be working many extra unpaid hours and a skill set that would allow us to adapt and use any situation as a teaching opportunity. So that's what I did, I started conversations with administration, established

parent and community partners; we created a vision and set some goals to rebuild the ag program and facilities. It was not easy and I can say I have not completed all goals or acquired all needed equipment to educate my students seven years later. In the end we were able to reclaim a classroom for Ag sciences and remodel the ag-mech shop, in all a \$2,000,000 remodel. I hope my experience and insight into remodeling our agriculture facilities will help other ag programs remodel facilities.

B. Advisory Process

The first steps in remodeling facilities needs to be setting up an advisory panel with parents, community members, industry partners, secondary educators, Vendors, basically anybody willing to contribute insight in what a modern agriculture facility should look like. During this initial stage the panel needs to create a vision, set some goals, and final put it all in a package that can be pitched to the administration, district, and school board for approval.

Setting up an advisory can be a daunting task what I did was schedule monthly meeting every second Thursday of each month at 6:00pm. This allowed plenty of time for people to get to the meetings. I would advertise the meetings in the daily school bulletin, created a monthly calendar on the chalk board, yes chalk board! Give extra credit to students if their parents would come, advertise in our local paper, and go out to community and introduce myself. I would go to lions clubs, Stockdale exchanges, visit local farmers and cooperate farmer's basically any group or organization willing to listen. My advice to you is to never ask for things/money right away introduce yourself and give them your contact information then ask if there was someone that would be willing to sit on an advisory panel or possibly communicate Via email, let them get to know you it is important to build relationships over time and gain their trust, then the goodies will come later.

After I had a panel set and it took a while be ready at the meetings have an agenda, be prepared to answer questions, and most of all create a relaxing atmosphere for differing points of view. Have a vision ready of what curriculum you think is needed, take a tour of the current facilities, and talk to them about community needs. Hopefully you will have potential employers on the advisory ask them what is needed to be hired by their company and what skill sets can be added to the curriculum. Introduce them to the leadership component of the ag program, FFA explain the opportunities the FFA members will have to expand their leadership skills and how valuable it is.

The next step after all have bought into the vision set some goals for each meeting example one meeting deals with equipment needed to teach floral culture, next

meeting deals with ag mech facilities, and another deals with ag science equipment. Lastly after you have a working 5 year facility remodel plan and the advisory has approved it have a conversation with you administration let them know of your future plans and offer to take them on a tour of the facilities. In my case my admin was aware of the problem they were just waiting for someone to present a vision and commitment to the program. Most administration will back you if they see you working hard for the students. Once you have the approval of the vision you can move on to the planning and funding stages.

C. Planning Process

The planning will be an ongoing process in a large scale remodel, there will be an initial phase, corrections and changes, final planning, and State revisions resubmitted. As had as everybody tries too, something will get missed our need to be changed due to construction, codes, being over budget, and equipment no longer available. The main thought on planning is have all the decision makers in on all the meetings so the information is not traveling through separate conversations.

In the initial phases of planning you are trying to collect as much information as possible on equipment you would like to purchase. If you are a large district there might be personnel at the district that will help but they most likely will not have any CTE or equipment background so you will need to compile a list of equipment. This will take time and need to be as accurate as possible, veig descriptions will make it harder for you in the bidding phases due to venders needing clarification on items.

Corrections and changes will most likely take place on large scale remodels because they take years to complete. My project is still being corrected after three years of construction. I ran into equipment that no longer excited or was updated, we had problems with the engineering blue prints, and even a firing of a contractor. Keep notes and a log to everything it will save you some time when you need to go back and revisit issues.

In the final planning stages district and engineers will help with the documents. You will need to work closely with them to insure all is in order. I had several meetings during this phase. After all documents and planning is finalized the DSA (state) will look over the project make sure you are meeting all the codes requirements and ask for revisions if needed. Count on a year for final approval process and green light is given. It took about 3 years for the grant proposal, engineering, planning, approval of project, and bidding before we broke ground.

Planning is never really over keep good notes, save and file emails, and be prepared to answers the same questions over and over again to several different people. I have had 3 different principals, 3 different vice principals, changes with all maintenance & operation directors and 2 assistant superintendence changes during our project.

D. Funding Process

Funding large remodel projects will not get done without receiving grants. The districts do not have money or are unwilling to spend on large remodel jobs and if you are in a large district like mine with 18 comprehensive high schools most of the money goes for repairs. Although When I started my remodel plans for the ag department our site went through a \$20,000,000 fifty year remodel which the agriculture program and 40 acre school farm received zero allotments plus they used my shop as a storage area for 2 years. Finding funding and writing grants will take time and you will need help with this process.

I was lucky and found out about a grant opportunity called prop ID it was funding made available to schools for \$3,000,000 for remodeling and \$6,000,000 for new construction. The bottom line is you will need to find the money for your remodel and mostly it will need to come from state, federal, or foundations your community /industry partners usually will not be able to fund large scale projects but occasionally can help out with a specific piece of equipment.

Researching grants can take time finding and reading, not all grants out there applies to you your needs or you qualify for. Foundation remodel grants can be hard to find but there is money out there for consumables that will help with the operation of a newly remodeled class/shop. Some of the grant opportunities can be found at

www.grants.gov

www.ca.gov/Grants.html

www.cde.ca.gov/index.asp

www.ed.gov/category/program/school-improvement-grants

After finding a grant you will need to rely on other staff for help with the actual writing of the grant. Our team consisted of a testing director for data, CTE department chair, and English teacher to check for errors. Most likely you will be under a time constraint on most grants we had about 3 weeks to write our intent to apply and 2 months to finalize grant proposal. Below is the finalized grant proposal we submitted.



CALIFORNIA DEPARTMENT OF EDUCATION

CAREER TECHNICAL EDUCATION FACILITIES APPLICATION

FORM A – COVER PAGE (Rev. 11/07)

Local Educational Agency Contact

Local Educational Agency (LEA)

Kern High School District

CDS Code

15635291530252

Printed Name and Title of Contact

Blanca G. Cavazos, Principal

Address

900 Varsity Road

City

Arvin

Zip Code

93203

County

Kern

Telephone Number

661-854-5561

Fax Number

661-854-5943

E-mail Address

bcavazos@kernhigh.org

Project Information

Type of Project: ☐ New Construction (including equipment) ☒ Modernization/Reconfiguration (including equipment) ☐ Equipment Only

School Name

Arvin High School

Name of Project

Arvin High School Modernization of Agriculture Facilities Project

Career Technical Education Industry Sector

Agriculture and Natural Resources

Estimated Total Cost of Project (See Form C)

\$1,518,945.00

Number of Teaching Stations

2

Annual Number of Students Served

330

Square Footage of Project

6,436

Total Amount of State Funds Requested (See Form C)

\$759,473.00

Approval

Date Governing Board Approved CTE Application (Board must approve project no later than April 30, 2008):

Date Advisory Committee (Element 1, Item B) and Feeder Groups and Partners (Element 3) approved the CTE Plan for this project:

Certification

The local educational agency (LEA) certifies that the Advisory Committee pursuant to Education Code Section 8070 has met and approved the CTE Plan, and the other requirements contained in Education Code Section 17078.72, including sections (i) (1 thru 7) have been accomplished, and minutes and other supporting documentation are on file at the LEA's Office. Further, the LEA certifies that the project is on a comprehensive high school site that meets the requirements of Education Code sections 51224, 51225.3, and 51228.

Donald E. Carter

Print Name of Authorized LEA Representative

Signature of Authorized LEA

Date

For California Department of Education Use Only

Application Log Number

Reviewer Number

Received By

☐ Original Application and Three Copies

☐ Floppy Disk ☐ CD Backup

Arvin High School Modernization of Agriculture Facilities Project
Career Technical Education Facilities/Equipment Request
Project Abstract

Sector Addressed:	Agriculture & Natural Resources
Total Project Cost:	\$1,518,945.00
State Funding Requested:	\$759,473.00
KHSD and Stakeholders Match:	\$759,473.00
Expected Number of Students Served:	330

Arvin High School proposes to provide our agriculture department with the appropriate facilities and equipment that will enable department staff to expand and enhance career pathways.

Utilizing current labor market information and input from our community partners, we have determined that with the appropriate modifications of classroom, shop and farm facilities and equipment, the agriculture program can successfully implement career pathways in agriscience and agricultural mechanics and add a new career pathway in ornamental horticulture. The first component of our proposal is to convert and modernize two existing classrooms to create a classroom/research center for our agriscience and ornamental horticulture classes. (These classrooms are currently used for other courses). This new space will move our agriscience classes out of the agricultural mechanics shop as well as house our new ornamental horticulture classes. This classroom will include horticulture equipment, agriculture science equipment and a research center. The addition of a horticulture program will draw more female students into the program. Presently our program is made up of 90% male students.

The second component of our proposal is to create a more relevant and up-to-date learning environment for agriculture mechanics students with modern equipment such as welders, oxy and acetylene welding and cutting stations, other metalworking equipment and ventilation and exhaust systems. The work space in the shop will be expanded by the addition of an exterior covered concrete

machine repair area with a beam hoist. The shop is over fifty years old and is currently filled with much of the original equipment. This modern technology will enable our students to be trained with the latest tools that are utilized in today's workforce.

Lastly, Arvin High School's 40-acre farm is one of the county's largest school farms. The third component of our proposal is the modernization of the school farm including removing and replacing the school farm irrigation system and purchasing modern farm equipment - a livestock trailer, tractor and harvesting equipment. Presently there are areas of the farm that are off limits to students due to collapsed irrigation systems. This funding will allow us to rectify the safety hazards and place the acreage back into production.

Element 1A – Career Technical Education Plan – Agriculture & Natural Resources Industry Sector

Arvin High School (AHS) is located in the southeast corner of the San Joaquin Valley. It serves the farming communities of Arvin, Lamont and Weedpatch (the location of the labor camp in *The Grapes of Wrath*). The school is surrounded by agricultural fields on the north, east and west sides of the campus. The majority of households are supported by adults who work in agriculture or agriculture-related industries.

The mission of Arvin High School is for all students to graduate prepared for college and/or a career. Student achievement will be measured by ongoing assessments. The Arvin High School community will work together to ensure the success of all students.

With the exception of the agriculture program, Arvin High School has been successful in maintaining and growing Career Technical Education programs as projected in the mission statement. Currently, students at AHS can select from one of two California Partnership Academies or eight career pathways. (See AHS CTE plan in Appendix).

Thirty years ago, a student at Arvin High School (AHS) could walk through the campus and see scores of classmates proudly wearing the Future Farmers of America (FFA) jackets. Students in the agriculture program enjoyed animal science and agriculture mechanics courses taught by two instructors and the school farm was bustling with activity and student projects. As the demographics changed over time, the student interest in the program declined and the teaching staff was reduced to one instructor. Unlike other CTE programs at AHS, the curriculum was not sufficiently contemporary and attracting

students became a serious challenge. Secondly, limited classroom space due to rapidly increasing enrollment forced the merging of the agriculture classroom and workshop. The overwhelming task of reigniting the program with limited resources proved to be daunting for the teacher. As a result, four different instructors have led the agriculture program over the past ten years. Donald Mills, the new agriculture teacher, is committed to growing the program beyond its previous days of glory. Since his arrival at Arvin High School, enrollment in the agriculture program has increased. Additionally, student participation in FFA activities - county fair and Greenhand conference - has increased, along with community service and pride. Previous community partners have also returned to participate on the Advisory Committee. The administration supports the program by dedicating \$8,000 of Carl Perkins monies annually to update equipment in the shop.

Presently, Arvin High's agricultural program consists of agriculture science and agriculture mechanics pathways. The first component of our proposal is to convert and modernize two existing classrooms to create a classroom/research center for our agriscience and ornamental horticulture classes. (The two existing classrooms are located across the hall from the agriculture mechanics workshop. Please see Agriculture Facilities schematic in Appendix). Our agriculture program will have the ability to fill a much needed void of qualified technical employees in the Arvin area. There is a large demand for agriscience and agriculture mechanics skilled employees due to the needs of local carrot growing and processing giants Grimmway Farms and Bolthouse Farms (the two largest carrot growing and processing firms in the world).

The new classroom will consist of agriscience equipment - processing equipment, stainless steel work basins, plumbing, sanitation station, and walk-in box for storage of products, cabinets, reach-in refrigeration, and miscellaneous floriculture equipment. The classroom will incorporate a research center with computer stations for students to conduct investigations related to their assignments and their career goals. Students will be able to access software and online programs that will help them understand the effects of technology on agriculture. (CTE Model Curriculum Standard C3.0)

The current agriculture mechanics workshop/classroom is outdated and the equipment that is in use at this time does not facilitate the skills needed for today's agriculture industry. The second component of our proposal is to create a more relevant and up-to-date learning environment for agriculture mechanics students with modern equipment such as welders, oxy and acetylene welding and cutting stations, ventilation and exhaust systems and other metalworking equipment. The shop also requires an electrical upgrade. The workspace in the shop will be expanded by the addition of an exterior covered concrete machine repair area with a beam hoist. By modernizing the facility and equipment, agriculture students will be able to obtain basic agriculture mechanics skills and safety procedures that are defined by CTE Model Curriculum Standards B1.0 through B12.0.

The third component of our proposal is the modernization of the school farm including removing and replacing the farm irrigation system and purchasing of modern equipment - a livestock trailer, tractor and harvesting equipment. The 40-acre school farm is used daily for educational purposes. With the farm being well over fifty years old, most of the irrigation system has collapsed and now requires above ground irrigation for thousands of linear feet. This above-ground system is constantly damaged by livestock. Additionally, the northwest side of the property cannot be farmed because of the lack of sufficient water pressure due to an inadequate irrigation system. Currently, sixteen acres of alfalfa and two acres of stone fruit are processed and sold to provide feed and care to our livestock that includes thirteen sows, two boars, ten ewes, one ram, and seven beef cattle. Teacher, Donald Mills, is committed to the modernization of the school farm. He has acquired community donations to plant more varieties of stone fruit that will enable students to learn modern pruning and harvesting techniques. The purchase of a livestock trailer, tractor and harvesting equipment will assist with animal science and ornamental horticulture pathway standards and help students gain valuable work experience that future employers require.

High Demand Labor Market - Agriculture and Natural Resources Sector:

Arvin is surrounded by a vast network of farming and processing corporations; Grimmway Farms employs thousands of people alone. In addition, Kern County is projected to experience 13.2% growth in agriculture related jobs through 2014. The demand for highly qualified agriculture personnel is abundant. Technical jobs such as welders, plumbers, mechanics, and electricians are in high demand. With the addition of new businesses and houses, nurseries and landscaping businesses are quickly becoming one of the top industries in Kern County. Students with technical skills in agriscience, agriculture mechanics and horticulture will be able to fill these jobs out of high school without any further training.

Bakersfield is but a small aspect of the larger picture of agriculture employment in the state of California. Agriculture touches one in ten jobs in the state and California produces \$28 billion in agriculture products, which in turn generates over \$100 billion in economic impact. The demand for agriculture specialists throughout the state is high and there are more job openings than there are qualified applicants. Within the agriculture and natural resources industry sector, some of the fastest growing or highest wage occupations in California include: agriculture marketing and sales, agriculture engineers, laboratory and research technicians, environmental scientists, landscape and turf managers, and pest management specialists.

Arvin High students in the agriculture and natural resources industry sector are engaged in an instructional program that integrates academic and technical preparation with a focus on career awareness, career exploration, and skill preparation in two pathways. The pathways emphasize a real world, occupationally relevant experience of significant scope and depth in agriculture mechanics, and agriscience. We propose to add the ornamental horticulture pathway. Supervised agriculture experience projects and leadership development are integral components of classroom and laboratory instruction. Students who complete this training are prime candidates for career employment and/or post-secondary education at local institutions such as Bakersfield College, Taft College, California State University, Bakersfield, California State University, Fresno or California Polytechnic University, San Luis Obispo.

Element 1B – Membership of the Advisory Committee
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The following lists the Agriculture Program Advisory Committee members:

Name	Business	Address/E-mail	Telephone
Steve Baumgarten	Barnes Welding	5150 Rosedale Hwy. Bakersfield, CA 93308 info@fresnooxygen.com	661 201-3042
Marisa Cornejo	SHR Realty Inc.	16073 Highway 65 Bakersfield, CA 93308 mcornejo@froehlichhomes.com	661 391-9291
James Cowan	Parent	516 Olsen Arvin, CA 93203	661 854-5407
Tabatha Mills	CSU, San Luis Obispo Ag Student	PO Box 82021 Bakersfield, CA 93380 millstabatha@aol.com	
Yolanda Pewitt	Teacher	8800 Hwy 155 Glennville, CA 93226 Yopewitt@aol.com	661 536-8651
Andy Stenderup	Stendrup Ag Partners	11201 E. Bear Mt. Blvd. Bakersfield, CA 93307	661 747-2593
Vaughn Easter	Kern Ridge Growers	5817 Chester W. Nimitz Bakersfield, CA 93304	661 809-1842
Scott Gurnett	Gurnett Construction	3650 Blue Loop Lane Arvin, CA 93203	661 854-0248
Leslie Ono	Bakersfield College	1801 Panorama Drive Bakersfield, CA 93305	661 395-4327

Element 1C – Ensuring Opportunity for All

Arvin High school is committed to ensuring that all students will be given the opportunity to participate in CTE programs, activities and experiences. In keeping with our mission - that all students graduate prepared for college and/or a career and that the AHS community will work together to ensure the success of all students - Arvin High operates a strong system of student support. A full-time certificated career technical counselor ensures all students are encouraged to take advantage of every career-related opportunity. Counseling and teaching staff promote our CTE courses by visiting classrooms at the middle schools in the feeder districts and at Arvin High to discuss course offerings including career pathways and Partnership Academy programs.

CTE courses are open and offered to all Arvin High students beginning with pre-registration during the spring of their 8th grade year, when students are made aware of the range of opportunities available. Once enrolled, students are encouraged to advance through the career pathways. In the spring of their freshman year, students are encouraged to apply to one of the two Partnership Academy programs if interested. As juniors and seniors, students may also pursue career paths through the Regional Occupational Center – both on and off campus. Articulation agreements enable students who taken specific CTE courses at AHS to receive up to 12 units of college credit upon enrollment at Bakersfield College. Arvin High is fully dedicated to preparing students for a post high school workforce as well as post-secondary education.

Element 1D – Certifications, Standards, Course Sequence and Career Pathways

Industry Validated Certifications:

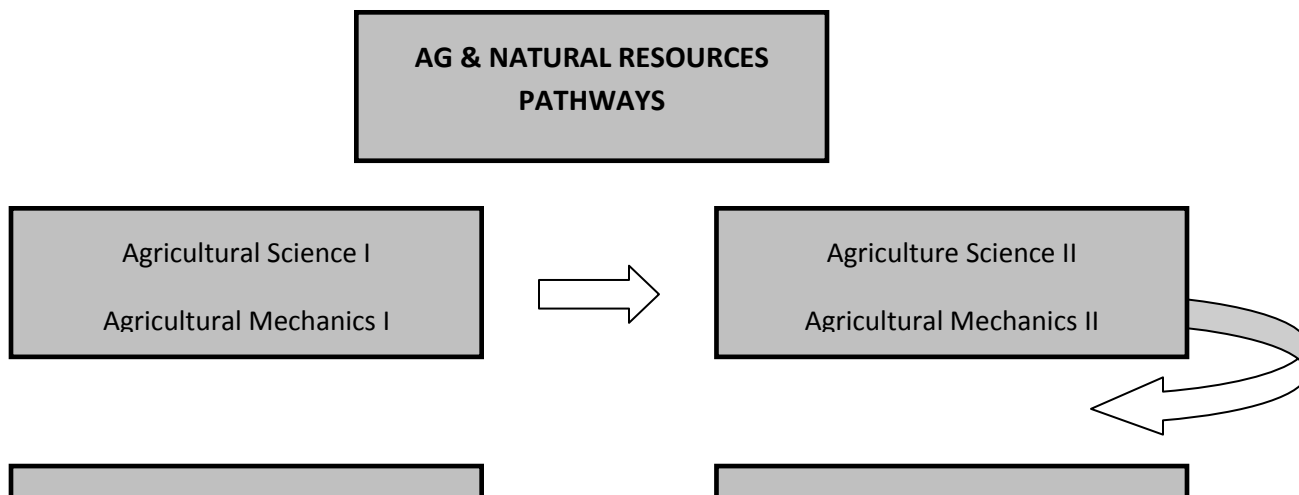
The agriculture department at Arvin High school is an active member of the national Future Farmers of America organization. All members of the Arvin FFA chapter are required by the national organization to have a supervised occupational experience. Students can earn certificates in entrepreneurship, proficiency, and career development events in any given pathway. Agriculture mechanics students who complete introductory and advanced coursework with satisfactory achievement of the pathway standards can receive introductory agriculture mechanics credit at Bakersfield Community College when they complete twenty-four college units. With the addition of the new pathway, we plan to work with the FDA and local colleges to develop a certificate program in ornamental horticulture. The Bakersfield College professor of ornamental horticulture, Leslie Ono, is serving on our advisory committee and has submitted a letter of support. We will also establish articulation agreements to encourage students to continue the career pathways beyond high school.

CTE Standards:

All CTE courses at Arvin High School are aligned to the California Career Technical Education Model Curriculum Standards, Grades Seven through Twelve. The agriculture and natural resource pathways incorporate the standards into unit plans and develop student understanding utilizing class work, projects, labs and activities in the classroom, workshop and school farm.

Sequence of CTE Courses - Agriculture and Natural Resources Career Pathways:

Arvin High School offers 89 CTE sections integrated within seven departments – English, Science, Social Studies, Health, Fine Arts, Industrial Technology, and Business and Technology – and sequenced to create eight career pathways serving 1,781 students (including those in college prep, GATE, honors, and special education). In addition, 43 AHS students participate in Regional Occupational Program courses at the district site. The following graph depicts the current course sequence for our Agriculture and Natural Resources Pathways:



The following is a description of the courses:

Agriculture Science I: Prerequisite for Agriculture Science II. This course will introduce first year agriculture students to hands-on laboratory and Earth Science curriculum.

Agriculture Science II: Students who complete this course and Agriculture Science I will fulfill the coursework necessary for taking the ACE (Assessment in Career Education) test involving the Core I Agriculture Education Curriculum.

Introduction to Agriculture Mechanics I: Prerequisite to Agriculture Mechanics II, III, and IV. Students are introduced to shop procedures, safety procedures, and tool identification. Students will perform maintenance on the school farm.

Agriculture Mechanics II, III, and IV: Designed for sophomores, juniors, and seniors with advanced knowledge of agriculture mechanics' maintenance, procedures, and welding equipment. Students are introduced to advanced standards B9.0 - B12.0. Students receive competency through hands on class work and in-depth study of standards-based curriculum.

Ornamental Horticulture I: Prerequisite for Ornamental Horticulture II. This course will introduce students to careers in the nursery, landscaping and floral industries. Students will learn plant identification, plant physiology, plant reproduction, nursery production and floriculture.

Ornamental Horticulture II: Designed for juniors and seniors with advanced knowledge of agriculture science and introductory ornamental horticulture. Students will learn landscaping design, installation and maintenance as well as review concepts presented in the prerequisite courses.

Element 2A – Number of Students

Course	Current Enrollment	Projected Enrollment				
		Year 1	Year 2	Year 3	Year 4	Year 5
Ag Science I	29	30	35	95	100	105
Ag Science II	21	25	30	45	50	55
Ag Science III	2	5	10	15	20	20
Ag Science IV	2	5	10	15	20	20
Ag Mechanics I	42	45	50	50	55	60
Ag Mechanics II, III, IV	14	15	20	25	30	30
Orn. Horticulture I		5	5	20	25	25
Orn. Horticulture II			5	5	15	15

Currently, Ag teacher, Don Mills has a full teaching assignment of courses within the Agriculture and Natural Resources Industry Sector. There are currently 110 students in the program. The projection of 165 students (averaging 33 per period) is based on the anticipated ability to attract students at the entry level courses and then retain them in the program with the up-to-date facilities, equipment and new curriculum. With the modernization of the school farm and agriculture mechanics workshop, and the addition of a classroom/resource center, Arvin High School would be able to recruit a second agriculture teacher when course enrollment increased. A second agriculture teacher would essentially double the projected enrollment after Year 2 of implementation. The projected enrollment for Years 3, 4 and 5 reflect a second teacher. The administration is committed to growing the program and dedicating staffing formula to respond to an expected increase in student interest and enrollment.

Element 2B – Guidance and Counseling

Arvin High guidance and counseling staff plays a key role in ensuring that the projected student enrollment will be met in the career pathways. Arvin High offers activities such as an annual Electives Fair where students can learn about the various elective courses/career pathways offered. Participating

students and staff have the opportunity to recruit and describe their respective pathway to incoming freshmen students and their parents. The agriculture students and teacher typically set up a pen of piglets in the campus quad as an additional attraction to the program. Annual student recruitment is also conducted by each pathway's teaching staff within AHS classrooms. The agriculture teacher meets periodically with the counseling staff to discuss student enrollment and progress. He also ensures that new counselors have an understanding of the program and curriculum.

Every spring the counseling department conducts class preferencing for the upcoming school year. The counselors provide students with a list of all available electives courses/pathways and inform students of requirements and prerequisites for each. All students receive college/career preparation counseling pursuant to SB813 and AB1802 on a yearly basis. This preparation includes creating and maintaining a Four-Year Plan, as well as a detailed College/Career Planning book for every student.

Element 3 - Feeder Schools, Partners, and Geographic Specifics

FEEDER DISTRICTS AND MIDDLE SCHOOLS		
DiGiorgio School District	DiGiorgio School Principal	Lomar P. Boatman
Vineland School District	Sunset School Principal	Mike Gonzalez
Lamont School District	Mt. View School Principal	Fred Molina
Arvin Union School District	Haven Drive School Principal	Dave Bowling
AHS SCHOOL SITE COUNCIL		
AHS School Site Council	Principal	Blanca G. Cavazos
AHS School Site Council	Assistant Principal	Jason Hodgson
AHS School Site Council	Certificated Representative	Lavonne Blessing
AHS School Site Council	Certificated Representative	Blaine Hawkins
AHS School Site Council	Certificated Representative	Elisa Kintz
AHS School Site Council	Certificated Representative	Kimberly Lee
AHS School Site Council	Certificated Representative	Linda Morales
AHS School Site Council	Certificated Representative	Erin Rader

AHS School Site Council	Certificated Representative	Jennifer Stevens
AHS School Site Council	Community Representative	Dan Boley
AHS School Site Council	Parent Representative	Ed Chalk
AHS School Site Council	Parent Representative	Griselda Chalk
AHS School Site Council	Parent Representative	Maricela Gallardo
AHS School Site Council	Parent Representative	Pilar Mabanta
AHS School Site Council	Parent Representative	Angel Munguia
AHS School Site Council	Classified Representative	Kathy Gomez
AHS School Site Council	Classified Representative	Christy James
AHS School Site Council	Classified Representative	Saul Lopez
AHS School Site Council	Student Representative	Edgardo Gallardo
AHS School Site Council	Student Representative	Mayra Perez
AHS School Site Council	Student Representative	Natalia Ornelas
AHS School Site Council	Student Representative	Grisel Gallardo
AHS COUNSELING STAFF		
Arvin High School	Counselor	Mary Crider
Arvin High School	Counselor	Carol Young
Arvin High School	Counselor	Alicia Martinez
Arvin High School	Counselor	Jareth Regpala
Arvin High School	Counselor	Johnny Duenas
Arvin High School	Counselor - CTE	Jim Johnston
Arvin High School	Counselor	Oscar Guevara
Arvin High School	Counselor	Sylvia Hernandez
Arvin High School	Counselor	Martha Elias

REGIONAL OCCUPATION CENTER		
Kern High School Dist. ROP	Principal	Sandra Banducci
COMMUNITY/BUSINESS PARTNERS – AHS ADVISORY COMMITTEE - SEE ELEMENT 1B, p. 6		
COMMUNITY/BUSINESS PARTNERS – KHSD CTE ADVISORY COMMITTEE - SEE APPENDIX, p.27		

The AHS Advisory Committee members participated in the development, articulation, review and approval of the Arvin High School Modernization of Agriculture Facilities Project plan. Feeder middle school principals, the AHS School Site Council and Counselors and the Regional Occupation Center principal reviewed and approved the plan. The KHSD CTE Advisory Committee also reviewed and approved the plan at their meeting on January 24, 2008.

Geographic Proximity to Other Programs:

Arvin High School is located in the southeast corner of the San Joaquin Valley in the city of Arvin, California (population 14,939). The city lies approximately 25 miles southeast of the city of Bakersfield (population 308,392). Arvin High School is the only high school that serves the city of Arvin, as well as the surrounding farming communities of Lamont and Weedpatch. The school is surrounded by agricultural fields and the majority of households are supported by adults who work in agriculture or agriculture-related industries and occupations. Kern High School District has 16 comprehensive high schools and a Regional Occupational Center. Of those sixteen high schools, eleven offer courses in agriculture. The closest campuses - Golden Valley and Foothill – both lie 14 miles from AHS, west and northwest, respectively. Both schools have an agriculture program. The Regional Occupational Center is 16 miles from our campus and provides an agriculture program as well. Upon graduation, students may also continue the Agriculture and Natural Resources pathways at Bakersfield College, California State University, Bakersfield (Environmental Resources Management degree), California State University, Fresno or California Polytechnic University, San Luis Obispo.

Element 4A – Accountability Plan for Enrollments and Outcomes

1 – Expected number of students who will complete a certificate:

All freshmen will receive Greenhand degrees this year. Approximately fifty sophomores, juniors and seniors will receive FFA Chapter degrees. One senior will be applying for the American degree next year. At the completion of this project, it is anticipated that 100% students will receive the Greenhand degree annually and 90% will receive Chapter degrees. Of the twelve seniors in the Agriculture program this year, eight students plan on attending college and four students plan on moving directly into the workforce. At the completion of this grant, it is projected that each teacher will move at least 30 students completely through the Agriculture and Natural Resources career pathways and have them enter Agriculture-related fields – higher education, certificate training or workforce placement – upon graduation.

2 – Expected number of students entering career-related employment:

For the senior class of 2006-07, 44% are expected to enter employment in a related industry, apprenticeship program or military.

3 – Expected number of students transitioning to post-secondary education:

Of seniors in the Agriculture and Natural Resources Pathways, 93% are expected to successfully transition into postsecondary institutions for more advanced study.

4 – Data analysis and data collection processes:

Attendance and enrollment data for the Agriculture and Natural Resources career pathways will be gathered at the school site using the AS-400 district data management system. Outcome data will be collected using The National Student Clearing House to track and report students' progress beyond high school. Data for 2006-07 is still being collected and tabulated. The Kern High School District also tracks students in CTE career pathways as required by the Carl Perkins federal grant. The resulting data is reviewed and analyzed by the advisory committees of each career pathway. Enrollment and outcome data is also analyzed by the AHS School Site Council during the annual development, review and revision of the Single School Plan. In addition, the data is presented to the School Site Council during their annual meeting focused exclusively on CTE programs. The Agriculture Advisory Committee will also

analyze and review the data to assist in monitoring the progress and success of the project - and the Agriculture Program in general. The Kern High School District Career Technical Education Committee will also analyze and review the enrollment and outcomes and make recommendations as needed. Details and highlights of the project will be disseminated through our bi-monthly parent publication, *The Growl*.

Element 4B – Education Code 51228(b)

Arvin High teachers, counselors, and administrators work closely with survey data to ensure we will meet or exceed our obligations pursuant to Education Code 51228(b). Arvin High provides all pupils with a rigorous academic curriculum that integrates academic and career skills, incorporates applied learning in all disciplines, and prepares all pupils for high school graduation and career entry. Arvin High offers all courses in the core subject areas at the college-preparatory level or higher, excluding the English Language Development courses levels 1-3. All students receive 9 weeks of infused career and consumer education in addition to a rigorous academic curriculum. Arvin High School provides students an opportunity to attain entry-level employment skills in business or industry through the following CTE programs: Health Careers and Construction/Design/Engineering (California Partnership Academies); JROTC (Junior Reserve Officer Training Corp); and career pathways in Biosciences, Health and Medicine, Finance and Business, Arts, Media and Entertainment, Agriculture and Natural Resources, Transportation Engineering and Design, Manufacturing and Product Development, and Building Trades and Construction.

ELEMENT 7 – UNIQUE CONDITIONS

Arvin High School is located in a rural area and serves the local farming communities of Arvin, Lamont and Weedpatch. The nearest high school is 14 miles away. Due to factors discussed in Element 1A, the agriculture facilities and equipment are in desperate need of modernization. Without this modernization, significantly increasing student interest and enrollment in the Agriculture and Natural Resources Industry Sector and recruiting and retaining a second teacher will continue to be a tremendous challenge.



CALIFORNIA DEPARTMENT OF EDUCATION

CAREER TECHNICAL EDUCATION FACILITIES APPLICATION FORM B – EDUCATIONAL SPECIFICATIONS AND EQUIPMENT/SPACE REQUIREMENTS SHEET (Rev. 2/07)

Use additional sheets as necessary.

Type of Project: ☐ New Construction ☒ Modernization/Reconfiguration ☐ Equipment Only

County	Project Tracking Number	Expected Number of Students Served
Kern		330
Local Education Agency	Name of Project	
Kern High School District	Arvin High School Modernization of Agriculture Facilities Project	
Name of School	Proposed Schematic Drawing Attached?	
Arvin High School	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Project Summary

Generally describe the scope of the career technical project and its educational goals.

The first component of our proposal is to convert and modernize two existing classrooms to create a classroom/research center for our agriscience and ornamental horticulture classes. (These classrooms are currently used for other courses). This new space will move our agriscience classes out of the agricultural

mechanics shop as well as house our new ornamental horticulture classes. This classroom will include horticulture equipment, agriculture science equipment and a research center. The second component of our proposal is to create a more relevant and up-to-date learning environment for agriculture mechanics students with modern equipment such as welders, oxy and acetylene welding and cutting stations, other metalworking equipment and ventilation and exhaust systems. The workspace will be expanded by the addition of an exterior covered concrete machine repair area with a beam hoist. The shop is over fifty years old and is currently filled with much of the original equipment. The third component of our proposal is the modernization of the school farm including removing and replacing the school farm irrigation system and purchasing modern farm equipment - a livestock trailer, tractor and harvesting equipment. Presently there are areas of the farm that are off limits to students due to collapsed irrigation systems. This funding will allow us to rectify the safety hazards and place the acreage back into production.

Program and Space Functionality

Describe the program activities for this career technical project/equipment and how the teaching station will support those functions.

Presently Arvin High's agricultural program consists of agriculture science and agriculture mechanics pathways. Our proposal is expand the program by adding a second classroom and teacher in the agriscience and ornamental horticulture pathways. The new classroom will consist of agriscience equipment - processing equipment, stainless steel work basins, plumbing, sanitation station, and walk-in box for storage of products, cabinets, reach-in refrigeration, and miscellaneous floriculture equipment. The classroom will incorporate a research center with computer stations for students to conduct investigations related to their assignments and their career goals. Students will be able to access software and online programs that will help them understand the effects of technology on agriculture. (CTE Model Curriculum Standard C3.0)

The modernization of the agriculture mechanics shop will create a safer and improved learning environment for students. The added covered machine repair area with the added beam hoist will greatly expand the opportunities for students to learn technical skills. Students will learn to use modern equipment such as welders, oxy and acetylene welding and cutting stations, and other metal working equipment. Agriculture students will obtain basic agriculture mechanics skills and safety procedures that are defined by agriculture pathway standards B1.0 through B12.0.

The school farm is used for educational purposes on a daily basis. Most of the irrigation system has collapsed which has resulted in above ground irrigation for thousands of feet. Livestock damage this above ground system daily and the west side of the property cannot be farmed because of the lack of water pressure. The modernization of the school farm including removing and replacing the irrigation system and purchasing of modern farm equipment - a livestock trailer, tractor and harvesting equipment will assist with animal science and ornamental horticulture pathway standards and help students gain valuable work experience that future employers require.

Space and Equipment Requirements

List required equipment needed to support the career technical project and the square footage requirements for all its other spaces (teaching station, storage, office, lab, lecture area, etc.). Please attach a schematic drawing of the proposed project.

(See Schematic, Keynotes, and Farm Arial View in Appendix)

Agriculture Mechanics Shop

- | | |
|-----------|---|
| 1 | (10) Thunder bolt AC/DC welders |
| 2 | (10) Power mig 215 welders |
| 3 | (2) 40 ton stockman hydraulic iron worker |
| 4 | 14" falcon cold saw |
| 5 | Multiple spindle drill press station |
| 6 | Torch mate plasma oxy fuel cutter |
| 7 | (10) oxy & acetylene welding and cutting stations with partitions |
| 8 | (6) steel tables |
| 9 | 30 welding helmets |
| 10 | 1 Craftsman Wood Saw |
| 11 | 1 Craftsman Metal Saw |
| 12 | 3 Plasma Cutters Miller Spectrum 1251 |
| 13 | Miscellaneous Equipment |

Processing Equipment

- 14 10x10 Refrigeration box
- 15 Industrial electric drill
- 16 (10) microscopes
- 17 (50) Industrial blade scissors
- 18 (10) Electronic scales
- 19 (5) Commercial quart mixer
- 20 (5) Commercial blenders, scoops, bowls, trays
- 21 (1) Dehydrator with shelves
- 22 (1) Vac master

Horticulture Equipment

- 23 (2) Reach-in refrigerators
- 24 Plant mobile station
- 25 (10) Plant light house
- 26 (5) Load dumper mulch cart
- 27 (50) Ratchet anvil pruner
- 28 (50) Turbo pruning saws
- 29 (50) Loopers
- 30 (50) Soils samplers
- 31 (50) PH testers
- 32 (1) Hydroponic system
- 33 (1) Aeroponic system

School Farm

- 34 Irrigation system
- 35 Alumina Gooseneck stock trailer
- 36 John Deere Backhoe
- 37 John Deere Tractor

- 38 Back Scraper
- 39 Offset International 770 Blades
- 40 Irrigation Pump
- 41 Online Small Baler Freeman
- 42 John Deere Planter
- 43 Trailer Sprayer

Classroom/Research Center – 50'-0" x 29'-11"

Agriculture Mechanics Workshop – 74'-3" x 50'-0"

School Farm – 40 acres

Exterior Covered Concrete Machine Repair Area with Beam Hoist – 20'-0" x 74'-3"

Functional Relationship to Site

Describe how the new construction or modernized building will impact other areas of the site.

The modernization of the classroom/research center will result in the relocation of the two current classes to portable classrooms on the school site. The classroom/research center and agriculture mechanics workshop will be located in an area on campus where most CTE classes are currently held.

Site Development Considerations

Provide, if any, additional site development needs associated with the career technical project.



CALIFORNIA DEPARTMENT OF EDUCATION

CAREER TECHNICAL EDUCATION FACILITIES APPLICATION

FORM C – BUDGET JUSTIFICATION/DETAIL SHEET (Rev. 2/07)

One Form per School Site, per Project

Local Education Agency Kern High School District	Project Name Arvin High School – Agriculture Science & Natural Resources
---	--

Provide sufficient detail to justify the budget. The budget justification page(s) must provide all required information even if the items have already been identified and discussed in another section. For each project or equipment description, list the associated costs. Please use additional sheets as necessary.

Project/Equipment Description	Subtotal Each Item
-------------------------------	--------------------

Project Description:

6.A. Cost, Rationale, Relation to CTE Plan: Costs noted below (building construction and all required equipment) are necessary to respond to the CTE Agriculture Science & Natural Resources offered to AHS students. This program is offered to respond to the continued local growth of the Agricultural industry and AHS commitment to ensuring all students possess a pathway to postsecondary education and careers. (See Element 1.A. for rationale and 2.B. for detail of procedures.) CTE courses are aligned with CTE Model Curriculum Standards, and courses integrate foundational standards (core academic knowledge) with industry sector specific standards (technical knowledge). (See Element 1.D. for program details)

Projected annual enrollment in the Agriculture Science and Natural Resources Pathway CTE program is 330 students. Cost per pupil is estimated to be: \$4,603. Rationale for this cost was to divide the total construction and equipment cost of the project (\$1,518,945) by the number of students served annually (330).

6.B. Industry Partner Financial Participation: While AHS has successfully garnered industry support of its CTE programs, financial support has not yet been offered. Pursuit of financial support by industry partners is an on-going endeavor.

Architectural

Demolition of Selected Existing Building Components

Provide Floor Material Finishes

Provide Wall Framing and Wall Finishes

Provide Dropped Ceiling Systems

Provide New Doors and Frames at Selected Existing Openings	
Provide Doors and Frames at New Openings	
Marker Boards	
Stainless Steel counters, Cabinetry	
Replace Existing Windows	55,000
	18,600
<u>Structural</u>	25,600
Structural Support System for Roof Mounted Mechanical	19,000
	12,300
<u>Mechanical/Plumbing</u>	7,000
Provide Sewer, Cold/Hot Water	7,200
Replace Existing Heating and Evaporative Cooling System at Agriculture Shop	35,600
	65,000
Replace Existing Heating and Air Conditioning System at Horticulture and Processing Classroom	
Provide Welding Hood / Fan Exhaust System at Agriculture Shop	
Replace Hand Washing Sinks	50,800
Provide Commercial Sink	
	17,800
<u>Electrical</u>	60,000
Upgrade Lighting System	
Upgrade Electrical Services (Main Switchboard)	
Upgrade Electrical Power System	30,500
Upgrade Fire Alarm System	
Provide Data and Communication Systems	42,000
	9,200

Sub-Total of Building Costs:	5,200
 <u>Processing Equipment</u>	
10x10 refrigeration box.....	40,600
Viking industrial electric drill.....	10,100
10 Nasco standard stereo microscopes.....	69,300
50 Industrial grade serrated blade scissors.....	18,500
10 Acculab electronic scales.....	28,000
5 Commercial Kitchen 5–Aid quart mixer.....	
5 Commercial Kitchen 5–Aid speed blenders, scoops, bowls,..... trays..	627,300
1 Dehydrator D-14 with stainless shelves.....	
1 #32238 Vac master SUP-20.....	
	34,500
Sub-Total of Equipment Costs:	17,250
	2,875
<u>Horticulture Equipment</u>	920
(2) Victory reach in refrigerator systems.....	2,750
5 Jewel 56” Plant mobile stations.....	2,000
10 Plant light house.....	790
5 Load dumper mulch cart.....	
50 Ratchet Anvil Pruner.....	1,500
50 Turbo pruning saws.....	4,360
50 Loppers.....	
1 Commercial-serves professional sprayer.....	66,945
50 Soils samplers.....	

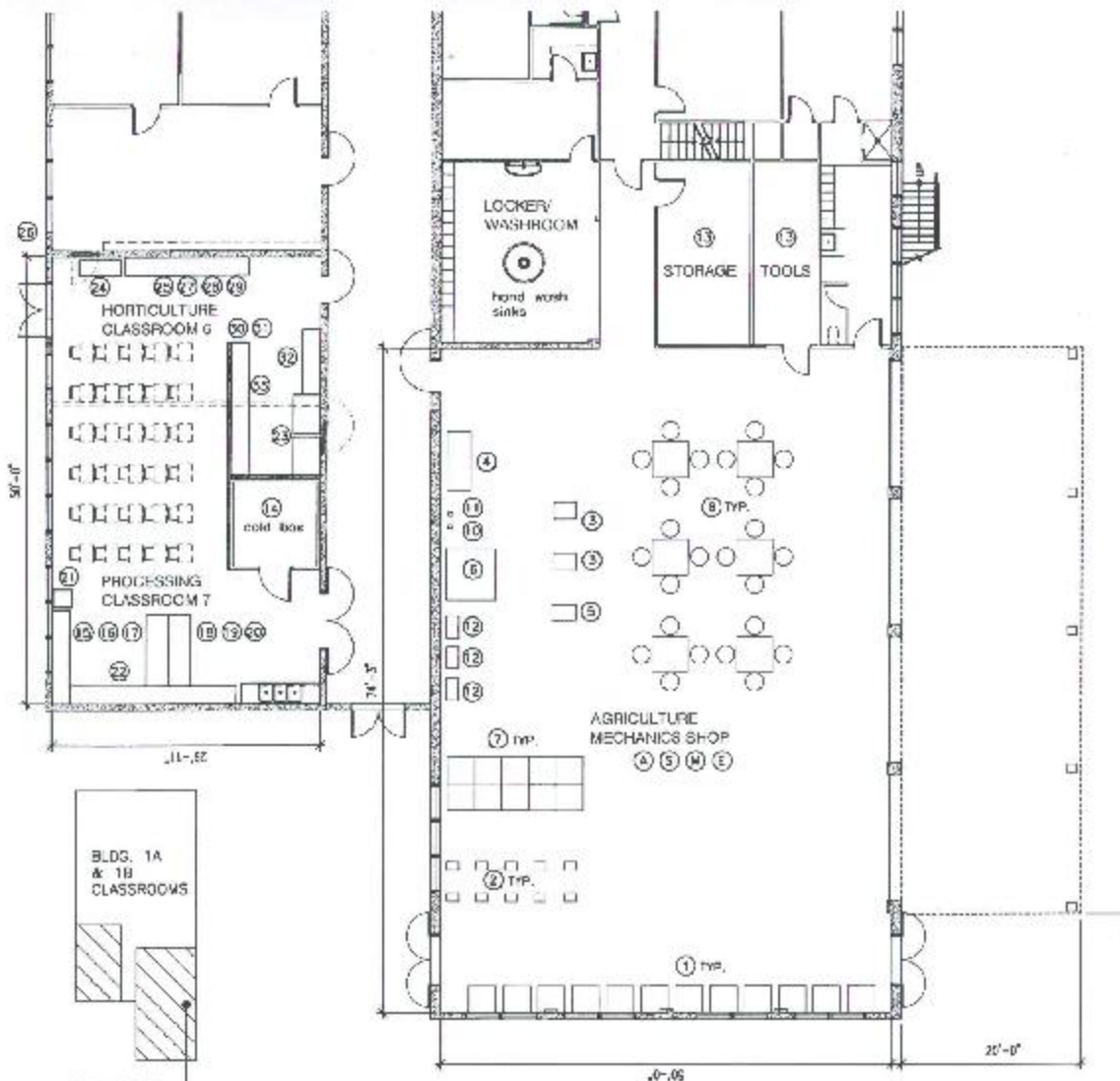
50 PH testers.....	
1 Hummert hydroponics' system.....	
1 Hummert aeroponic system.....	31,200
	5,200
Sub-Total of Equipment Costs:	1,150
	1,150
	700
<u>Agriculture Mechanics Shop</u>	1,150
10 thunder bolt AC/DC welders model MLR90364246696 with.... welding partitions and working tables	3,200
	2,600
10 power mig 215 welders model LWCK2326-1.....	5,200
(2) 40 ton stockman hydraulic iron worker order #Re55-..... 4014tm220	2,700
14" falcon cold saw order #R650-F3502ma.....	2,700
Multiple spindle 20" variable speed drill press station order..... #RF60-2286504	2,700
Torch mate #4CWC plasma oxy fuel cutter.....	
10 oxy & acetylene welding & cutting station.....	59,650
30 welding helmets phantom auto darkening model 29711 item.. #IN791	
1 Craftsman wood cutting board saw.....	
1 Craftsman metal cutting board saw.....	
3 Plasma cutters miller spectrum 1251.....	85,500
<u>Miscellaneous Equipment:</u>	
5 Industrial maintenance tool sets.....	22,600
10 Fluke 89 series IV analog multimeter.....	22,600
1 F9-IR13 Ingersoll – Rand Air Compressor.....	
(10) 3/8" Square Drive Air Ratchet.....	7,600

(10) Air grinders Craftsman 9-18811.....	22,600
1 Electrical Chain Hoist Ingersoll – Rand.....	
5 Industrial Rated Milwaukee Drill.....	17,100
(5) 3/8” 5AMP Milwaukee Drill.....	52,600
5 Craftsman raters routers.....	9,600
10 Dewalt grinders.....	
5 Deremel 7360 rotary tool.....	1,700
10 Electrical Chain Hoists Ingersoll – rand Sanders Craftsman....	1,900
5 Milwaukee Swinzall.....	16,500
6 Heavy duty metal table.....	
	5,200
Sub-Total of Equipment Costs:	3,100
	2,600
	2,600
	1,500
<u>School Farm</u>	3,100
Irrigation system.....	1,150
Alumina gooseneck stock trailer.....	900
5025 John Deere Tractor.....	1,150
John Deere Backhoe.....	1,500
8 High Back Scraper.....	1,250
13’ Offset International 770 Blades.....	1,250
1 McClure Irrigation Pump.....	1,250
(1) 1390 Online Small Baler Freeman.....	14,200
1 John Deere Planter.....	

(1) 570 High Clearance Trailer Sprayer.....	301,050
Sub-Total of Equipment Costs:	
	125,000
	32,600
	55,000
	110,200
	5,600
	11,700
	32,600
	32,500
	21,600
	37,200
	464,000
Total Amount of Funds Requested	1,518,945

Total Match Amount 50%	Source of Match Kern High School District Funds
Time Payment Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Financial Support from Industry Partners N/A
Other Sources of Funding N/A	

Agriculture Facilities Schematic



KEY PLAN

PARTIAL FLOOR PLAN

LEGEND

- NEW WALL
- - - - - REMOVED WALL

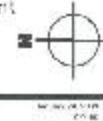
REFER TO NEXT PAGE
FOR KEYNOTES DENOTED
ON THIS PAGE

Arvin High School
Agriculture & Natural Industry Sector
CTE Facilities & Equipment Grant



Agriculture Science,
Natural Resources

Arvin High School
Kern High School District



KEYNOTES

A Architectural

Demolition of Selected Existing Building Components

Provide Floor Material Finishes

Provide Wall Framing and Wall Finishes

Provide Dropped Ceiling Systems

Provide New Doors and Frames at Selected Existing Openings

Provide Doors and Frames at New Openings

Marker Boards

Exterior Covered Concrete Machine Repair Area with Beam Hoist

Stainless Steel Counters, Cabinetry

Replace Existing Exterior Windows

S Structural

Structural Support System for Roof Mounted Mechanical

M Mechanical/Plumbing

Replace Existing Heating and Evaporative Cooling System at Agriculture Shop

Replace Existing Heating and Air Conditioning System at Horticulture and Processing Classroom

Provide Welding Hood / Fan Exhaust System

Replace Hand Washing Sinks

Provide Commercial Sink for Food Processing

Provide Sewer and Cold/Hot Water for Horticulture and Processing Classroom

E Electrical

Upgrade Lighting System

Upgrade Electrical Services (Main Switchboard)

Upgrade Electrical Power System

Upgrade Fire Alarm System

Provide Data and Communication Systems

Equipment Description:

Agriculture Mechanics Shop

- 1 (10) Thunder bolt AC/DC welders
- 2 (10) Power mig 215 welders
- 3 (2) 40 ton stockman hydraulic iron worker
- 4 14" falcon cold saw
- 5 Multiple spindle drill press station
- 6 Torch mate plasma oxy fuel cutter
- 7 (10) oxy & acetylene welding and cutting stations with partitions
- 8 (6) steel tables
- 9 30 welding helmets
- 10 1 Craftsman Wood Saw
- 11 1 Craftsman Metal Saw
- 12 3 Plasma Cutters Miller Spectrum 1251
- 13 Miscellaneous Equipment

Processing Equipment

- 14 10x10 Refrigeration box
- 15 Industrial electric drill
- 16 (10) microscopes
- 17 (50) Industrial blade scissors
- 18 (10) Electronic scales
- 19 (5) Commercial quart mixer

- 20 (5) Commercial blenders, scoops, bowls, trays
- 21 (1) Dehydrator with shelves
- 22 (1) Vac master

KEYNOTES (Continuation)

Horticulture Equipment

- 23 (2) Reach-in refrigerators
- 24 Plant mobile station
- 25 (10) Plant light house
- 26 (5) Load dumper mulch cart
- 27 (50) Ratchet anvil pruner
- 28 (50) Turbo pruning saws
- 29 (50) Loopers
- 30 (50) Soils samplers
- 31 (50) PH testers
- 32 (1) Hydroponic system
- 33 (1) Aeroponic system

School Farm

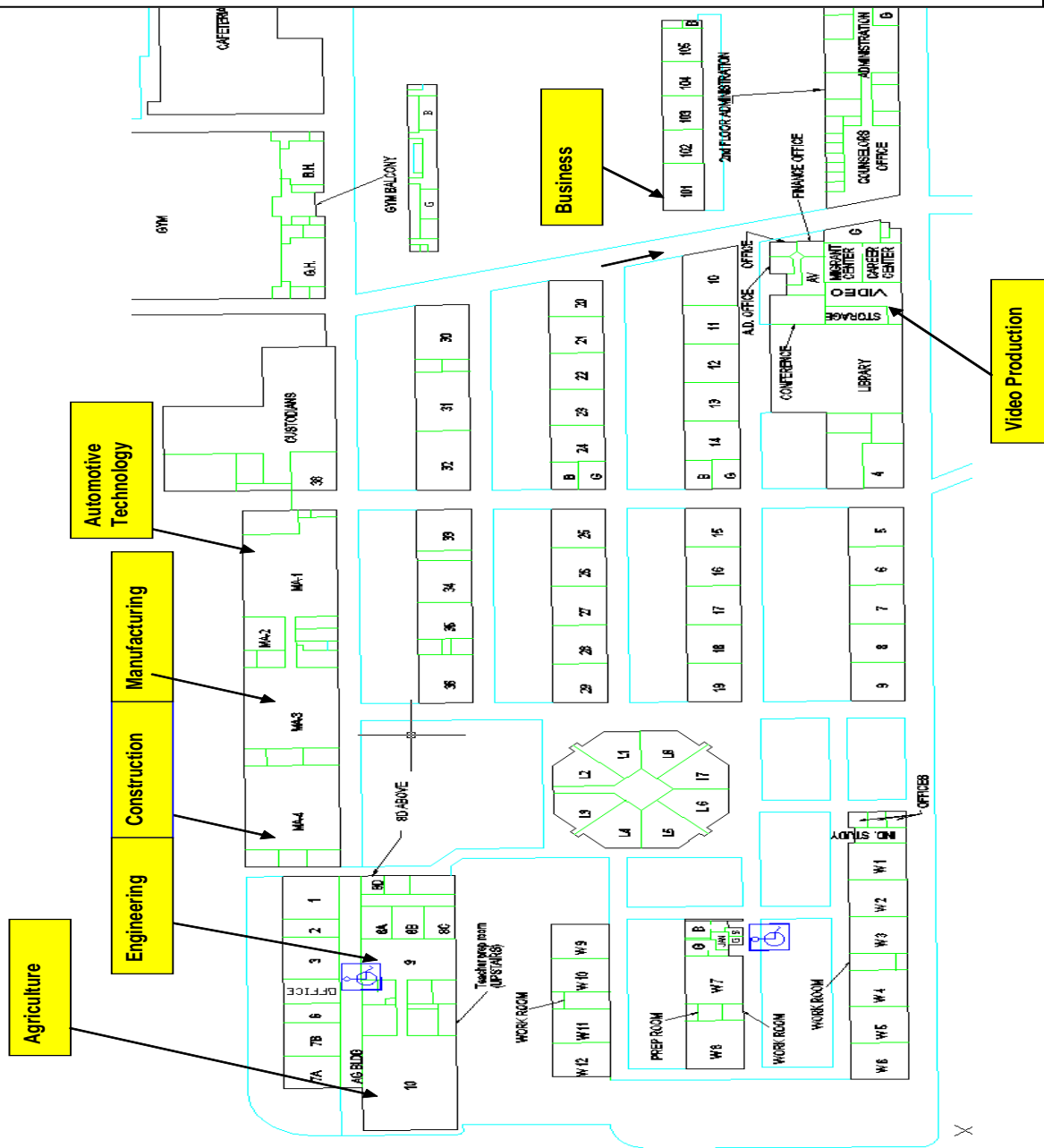
- 34 Irrigation system
- 35 Alumina Gooseneck stock trailer
- 36 John Deere Backhoe
- 37 John Deere Tractor
- 38 Back Scraper
- 39 Offset International 770 Blades
- 40 Irrigation Pump
- 41 Online Small Baler Freeman

42 John Deere Planter

43 Trailer Sprayer



School Site Plan Drawing



Kern High School District CTE Advisory Committee Roster

Peter DeArmond, Director	Steve McEvoy, General Sales Manager
Weill Institute SBDC of Bakersfield College	KERO 23 ABC Bakersfield
2000 K St., 3rd Floor	321 21st St.
Bakersfield, CA 93301	Bakersfield, CA 93301
Lurena Cady	
Interior Concepts by Lurena	Michael D. Keese, D.V.M.
1604 19th St.	Bakersfield Veterinary Hospital
Bakersfield, CA 93301	4410 Wible Rd.
	Bakersfield, CA 93313
Michael T. Elliott	
Michael Elliott Construction	Darlyn Baker, Rn, C.
15948 Shellie Marie Ave.	Director, Healthcare Services
Bakersfield, CA 93312	Interim Healthcare
	4801 Truxtun Ave.
	Bakersfield, CA 93309
Brian M. Richards, President	Ted Nicholas, Vice President/Gen. Mgr.
Serban Sound and Communications	3 Way Automotive Group
312 Kentucky St.	3800 California Ave.
Bakersfield, CA 93305	P. Box 9609
	Bakersfield, CA 93389-9609
Greg Honegger, CPA	
19475 Cavanagh	
Bakersfield, CA 93314	

Joe Gregory, Supervisor

ARRC Technology

1600 Mill Rock Way

Bakersfield, CA 93311

Dave Melo

Melo's Gas & Gear

4580 State Rd.

Bakersfield, CA 93308

John Pavletich, CEO

Pavletich Electric & Communications

6308 Seven Seas Ave.

Bakersfield, CA 93308

Matt Stevens, Facilities Coordinator

Rain for Rent

3404 State Rd.

Bakersfield, CA 93308

Tim Roberts, Sales Rep.

D'Angelos

406 Chico St.

Bakersfield, CA 93305

Bob Kopp, Owner

TEC Services

8534 Golden State Hwy.

Bakersfield, CA 93308

Fernando Aguirre, Network Engineer

iKnowTechnology, Inc.

P.O. Box 80461

Bakersfield, CA 93380-0461

Mark Bartlett

Specialty Automotive Engineering

300 Watts Dr.

Bakersfield, CA 93307

Dan Corriea, President

Weststar

5760 E. Lerdo Hwy

Shafter, CA 93263

Garrett Ming, Vice President Gen. Mgr

Jim Burke Ford

5300 Gasoline Alley

Bakersfield, CA 93313

Andrea Gavin #780, Sr. Police Officer
Bakersfield Police Department
1601 Truxtun Ave.
Bakersfield, CA 93302

Sam Williams, Sales Mgr.
Rabobank Arena
1001 Truxtun Ave.
Bakersfield, CA 93301

Paul Eagleson, Owner
Eagleson Body Works, Inc.
1516 25th St.
Bakersfield, CA 93301

John Pitre, General Manager
Motor City Auto Center
3101 Pacheco Rd.
Bakersfield, CA 93313

Dennis L. Thompson, Fire Chief
Kern County Fire Depart.
5642 Victor St.
Bakersfield, CA 93308

Marilyn Hallman, Field Producer
Kids Count
1300 18th St.
Bakersfield, CA 93301

Debbie Davis, Coordinator
Career Services Center
5121 Stockdale Hwy, Sute. 100
Bakersfield, CA 93309

John Noriega, M.Ed.
Kern Regional Center
3200 N. Sillect Ave.
Bakersfield, CA 93308

Renee Massey, Operations
Castle & Cooke
P.O. Box 11165
Bakersfield, CA 93389-1165

Bob Beechinor
34334 Saunders Ave.
Bakersfield, CA 93314

Mindy Wilmot, Workforce Coordinator
Kern Economic Development Corp.
2700 M St., Suite 200
Bakersfield, CA 93301

Mike Manning, Pilot Manager
Pilot Services
7001 Etter
Bakersfield, CA 93308

Dave Taylor
Hall Ambulance Service
1001 21st St.
Bakersfield, CA 93301

Voloney White
Extraordinaire
200 New Stine
Bakersfield, CA 93309

John Whitney
B S & E Rents
1220 Brundage Lane
Bakersfield, CA 93304

Dominic Webby
Wall St. Alley T-Shirt Co.
4125 E. Brundage Lane
Bakersfield, CA 93307

Laura Ramsey
Kern County Personnel
1115 Truxtun Ave.
Bakersfield, CA 93301

Brad Nelson
Sierra Printers
901 19th St.
Bakersfield, CA 93301

Denise Haynes
Kern County Animal Control Services
201 S. Mt. Vernon Ave.
Bakersfield, CA 93307

Willie Sandoval, Principal
Golden Valley High School
801 Hosking Ave.
Bakersfield, CA 93307

Dr. Dennis Scott
Associate Superintendent of Business
Kern High School District
5801 Sundale Ave.
Bakersfield, CA 93309

Don & Nancy Renfro
Renfro & Cuningham, Inc.
2200 Truxtun Ave.
Bakersfield, CA 93301

Jack "Woody" Colvard, Director
Facilities Planning
Kern High School District
5801 Sundale Ave.
Bakersfield, CA 93309

Brad Henderson
BFGC Architects Planners, Inc.
5500 Ming Ave.
Bakersfield, CA 93309

Bruce Wahl, Asst. Director
Facilities Planning
Kern High School District
5801 Sundale Ave.
Bakersfield, CA 93309

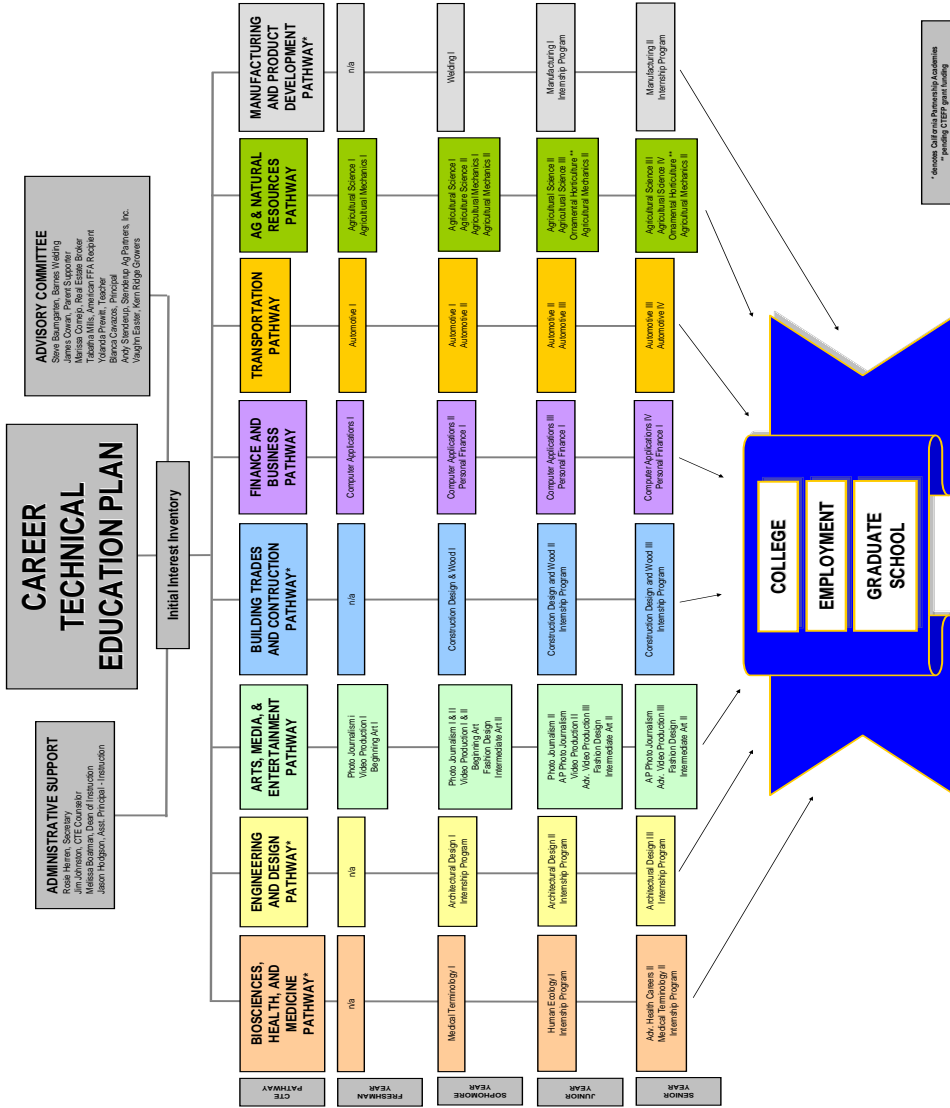
Bill Melby
Ordiz-Melby Architects, Inc.
5500 Ming Ave.
Bakersfield, CA 93309

Michael George
Kern Schools Federal Credit Union
9500 Ming Ave.
Bakersfield, CA 93311

Bob Klassen
Klassen Corp.
2021 Westwind Dr.
Bakersfield, CA 93301

Arvin High School – Career Technical Education Plan

ARVIN HIGH SCHOOL



E. Architecture/Design Process

You will probably not have to pick your architect or engineer. This will be done by the district office. When a firm is hired you will need to meet to convey your vision of your shops layout. They will need as much detail as possible; they will want to know where equipment will be located, Electricity needs, what are the dimensions of equipment, HP of equipment, Etc.

Once you have a basic diagram the engineers will look at it and make corrections if needed. After you have finalized your blue prints it will be submitted to the state for approval. The state (DSE) engineers will look at it and check for code violations, handicap assessable issues, and overall compliance issues. We had to add a wall to separate the wood shop and the welding shop, add more space between rows for accessibility, and limited us to 1000 cubic feet of gas due to not installing a sprinkler system.

After approval of project by the state you can then start your project, during your project work order changes and new engineering will probably take place. I did not keep track of how many of these work order changes were made but they were in the hundreds. Most of them you never hear of these consist of changing a light fixture or maybe a bracket to another one but the big ones everybody gets involved with basically because of money issues. Example electrical outlets would be installed on a wall that would prevent us from purchasing certain welding booths or doors would be too small for carcasses to be brought into our walk-in-box. These type of work order changes usually create over budget issues. We had 4 CTE remodels going on at one time and I was told we were over budget by \$1,000,000. When this happens you will be asked to modify your vision, plan, and equipment, I would encourage anybody not to. A lot of time and input went into this project to get it right. If you start to drastically modify your plans you will be left with a class/shop unable to teach the skills you intended to. Be polite and prepared to justify the need of said equipment. In my case I continually had to justify our planned walk-in refrigeration box that we would use for meat science & evaluation. The district even had to replace a box that was purchased due to trying to cut corners. If you have your facts and information ready this will help you when these type of situations come up.

F. Contracts/Bidding Process

There will be two phases of bidding, one will be for the overall demolition and construction of rooms and the other will be by vendor's bidding on the individual equipment. Contracts will go out by the district; contractors will have a deadline to submit their bids. Over all construction bids you will not be involved in contractors will bid according to the blue prints, site visit and will deal directly with the district personnel. FYI - the district will always take the cheapest bid. When it comes time to start the individual equipment purchases you will need to provide a detailed description of items so potential bidders can matchup their equipment with your description. This again can take some time to do remember if you keep good records in the planning phase this can be less stressful on you. I had a computer malfunction and lost all my documents and when it came time for me to work on this I had to go back to notes and catalogs to retrieve the information, back up your files! I have attached the bidding document we used to receive bids. During the compiling of equipment info in the planning phase if possible try to use one vendor for multiple items, it will help you. There are vendors out there that all they do is act as a middle men, so some of your equipment might wind up being purchased this way. If so keep records and invoices of all purchases and deliveries make copies if the district needs them for their records. When receiving delivery of items try to correlate with district and vendor on a delivery time if possible. I had a \$5000 plasma torch walk in the front office and out without my knowledge of the delivery. The district had to eat it because somebody signed for it in the office. Most of the time office personnel do not have the knowledge or time to make sure they received what was said. Lastly vendors are responsible to mail the district an invoice for payment most of the time this does not happen and the invoice come to the site and you. Make a copy for your records and send the original to the district for payment. What I have been doing is scanning it into my documents and sending a electronic version to the district. This allows you to easily find an invoice if there is a problem. I have attached an example of an invoice I sent.

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
PROCESSING EQUIPMENT						
1.	33	1	EA	VIKING INDUSTRIAL ELECTRIC DRILL is superseded by <ul style="list-style-type: none"> Hobart Legacy HL 600 Planetary Mixer 2.7hp, 60qt, 4 fixed speed, gear trans, 50 minute timer, #12 attach hub power bowl lift, stainless steel bowl, "B" beater, "D" wire whip, "ED" dough hook, 208v, 3 phase, 10 amps STATE PRODUCT BID _____		
2.	34	10	EA	NASCO STANDARD STEREO MICROSCOPES <ul style="list-style-type: none"> Nasco Standard Stereo Microscope-30x total magnification Product # SB26447M 45 degree inclined head for optimum viewing efficiency and comfort Head raises, lowers, rotates 360 degrees on pillar for off-base viewing Paired 10X wide-field eyepieces with rubber eye shields (3X objectives-magnifies 30X) Interpupillary adjustment Diopter adjustments on one side Top and bottom LED illumination, corded Rack and pinion focusing protected by slip clutch Tension control adjustment eliminates drift High-Intensity, low-voltage illumination for optimum light Reversible black/white stage plate (also includes frosted glass stage plate) All parts lock on Base mounted on/off switch, heavy-duty three-wire safety cord and plug Dustcover Limited lifetime warranty STATE PRODUCT BID _____		
3.	35	50	EA	INDUSTRIAL GRADE SERRATED BLADE SCISSORS <ul style="list-style-type: none"> Industrial Grade Serrated Blade Scissor 8 inch stainless steel serrated blade meat scissors for processing poultry. STATE PRODUCT BID _____		
4.	36	10	EA	ACCULAB ELECTRONIC SCALES <ul style="list-style-type: none"> Aculab Electronic Scales-VIC/303 precision balance Optional RS-232 or USB interface kit (field installable) Protective flip-down and removable plastic cover for shipping protection and allows stackable storage 		

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
				<ul style="list-style-type: none"> External calibration weight 100g included Unique durable design for all applications Applications include: Counting, Percent Weighing, Totaling, Display Hold, Specific Gravity, Mass unit conversion 14 Mass unit conversions (g, oz, lbs, lbs:oz, dwt, ozt, grains, Newton, carats, Taels) Parts counting with selectable reference sample (1-100) AC adapter (included) External one button calibrations with 3 weight options Lock down capability 2 year warranty <p>STATE PRODUCT BID _____</p>		
5.	37	5	EA	COMMERCIAL KITCHEN 5-AID QUART MIXER <ul style="list-style-type: none"> 575-watts Bowl-lift design 6 quart polished stainless steel wide-mouth bowl with contoured handle Soft Start feature prevents splash outs Direct drive transmission, all-steel gears, and all-metal construction Commercial-style motor protection Includes PowerKnead Spiral Dough Hook, flat beater, stainless steel wire whip, and pouring shield Stainless Steel preferred Dimensions: H 16.5" x W 11.3" x D 14.6" <p>STATE PRODUCT BID _____</p>		
6.	38	5	EA	COMMERCIAL KITCHEN 5-AID SPEED BLENDERS, SCOOPS, BOWLS, AND TRAYS <ul style="list-style-type: none"> Powerful 0.9 Horsepower Motor Intelli-Speed Electronic Controls 56-Ounce Piece Shatter-Resistant Polycarbonate Jar Easy to Use 5-Speed Controls Commercial-Quality, Steel Reinforced Coupler Advanced Air Flow Design keeps the blender cool for continuous blending Stable, die-cast metal base with four nonslip feet Contoured pitcher for thorough and even blending Built in drain holes in pitcher Automatic crush ice button Dimensions: H 15 3/16" x W 7 1/4" x D 9" <p>STATE PRODUCT BID _____</p>		
7.	32	1	EA	DEHYDRATOR D-14 WITH STAINLESS SHELVES <ul style="list-style-type: none"> 110V/60Hz (standard household current) Two 800 watt heating elements (1600w total) Dual 7" rear-mounted fans for strong air flow LED display that includes: Temp setting 84 degrees Fahrenheit-200 degrees Fahrenheit, timer, and actual temperature 17 hour timer 15-18 lb. jerky capacity 3-4 hour start to finish for jerky 14 wire racks each 20.75" x 18" (2.6 sq. ft. per rack) Space between racks: 1.25" Space between wires within rack (3/8") 		

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
				<ul style="list-style-type: none"> Outside dimensions: 21.5"W x 22.23"D x 30.3"H (with legs) Weight: 60-72 lbs, depending on type of racks installed Must include: Non-stick shelves with 3/8" holes and Stainless Steel shelves with 3/8" holes <p>STATE PRODUCT BID _____</p>		
8.	31	1	EA	<p>#32238 VAC MASTER SUP-20 is superseded by</p> <ul style="list-style-type: none"> VacMaster SVP-30 Vacuum Sealer 2-12" Seal Bars with 31" between bars and double sealing wire 110v, 60Hz, 20 amps 1.5 Hp Rotary Oil Pump, 18 CFM Pump Cycle: 10 amps Sealing Cycle: 30 amps Cycle Time: 20-45 seconds Adjustable Vacuum up to 29.95" Hg Vacuum Level: 29 1/2" Hg Hands Free Operation Stainless Steel Chamber (36"L x 12.5"W x 4"D) USDA Accepted Will handle bags up to 15" x 18" Overall Size: 19" x 21" x 18 1/2" Weight: 180 lbs. One year warranty Operation Manual Bags <p>STATE PRODUCT BID _____</p>		
HORTICULTURE EQUIPMENT						
9.	40	1	EA	<p>(2) VICTORY REACH IN REFRIGERATOR SYSTEMS is superseded by</p> <ul style="list-style-type: none"> (1) 17 x 3 x10, Custom Built Stainless Steel Reach-In Floral Box Super Door Height Evaporation Coil 3 Rows Horizontal Lighting, 2 top & 1 bottom 24 Continuous Rack System Shelves Black Glass Back Drop Mirrored Interior Ends Standards & Brackets Doors Hinge Left Black Metal Kickplates Refrigerant, R404 Rubberized Black Floor Mesh Copeland Outdoor Unit & Doghouse Remote Doghouse for Condensing Unit CPC Control Link with Remote Display Quick Disconnects, Condensing Unit Shipped Off Case Dimensions: 185" x 36" x 90" <p>STATE PRODUCT BID _____</p>		

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
10.	41	5	EA	JEWEL 56" PLANT MOBILE STATIONS is superseded by <ul style="list-style-type: none"> Jewel 74" Plant Mobile Station Model # B4-B Hummert Catalog #65-6935-1 STATE PRODUCT BID _____		
11.		10	EA	PLANT LIGHT HOUSE <ul style="list-style-type: none"> Model # G1A Hummert Catalog # 65-6952-1 STATE PRODUCT BID _____		
12.		5	EA	LOAD DUMPER MULCH CART <ul style="list-style-type: none"> Item # Met-1236HD Flatbarrow Hummert Catalog # 38-8990-1 STATE PRODUCT BID _____		
13.		50	EA	RATCHET ANVIL PRUNER <ul style="list-style-type: none"> Power-Lever Anvil Pruner Model # 9633 STATE PRODUCT BID _____		
14.	42	50	EA	TURBO PRUNING SAWS <ul style="list-style-type: none"> Model # PM-24L Hummert Catalog # 53-4029-1 STATE PRODUCT BID _____		
15.	43	50	EA	LOPPERS <ul style="list-style-type: none"> Corona Bypass Loppers Model # WL6361 STATE PRODUCT BID _____		
16.		1	EA	COMMERCIAL-SERVES PROFESSIONAL SPRAYER <ul style="list-style-type: none"> Versa Sprayer Model # VS100-HG Hummert Catalog # 06-2516-1 Equipment must include the following: <ul style="list-style-type: none"> 30' Boomless Spray Model # SB-30 Hummert Catalog # 06-2535-1 75' Extension Hose Model # SE75 Hummert Catalog # 06-2634-1 STATE PRODUCT BID _____		
17.	44	50	EA	SOILS SAMPLERS <ul style="list-style-type: none"> 36" Soil Sample Kit Specifications: <ul style="list-style-type: none"> 36" Tube Kit Hummert Catalog # 53-1233-1 STATE PRODUCT BID _____		

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
18.	45	50	EA	PH TESTERS <ul style="list-style-type: none"> Pocket Type Analytical PH Meter Model # 107 Hummert Catalog # 42-1320-1 STATE PRODUCT BID _____		
19.		1	EA	HUMMERT HYDROPHONICS SYSTEM <ul style="list-style-type: none"> Hydro-Trough Hydroponic System, Large Hydro-Trough Kits with Nutri-Test Kit Must include all equipment necessary for use, ie; pumps, fertilizers, etc. STATE PRODUCT BID _____		
20.		1	EA	HUMMERT AEROPANIC SYSTEM <ul style="list-style-type: none"> Aeroflow 2 60 Aeroponics System Model # GH8002 Pricing Must Include: System 5' x 6' Extension <ul style="list-style-type: none"> Model #GH8003 STATE PRODUCT BID _____		
AG Mechanics Shop						
1.	1 & 24	10	EA	THUNDER BOLT AC/DC WELDERS MODEL MLR90364246696 WITH WELDING PARTITIONS AND WORKING TABLES is superseded by <ul style="list-style-type: none"> Miller XMT 350 Stick Welders Dimensions are 5' x 5' Welders should include +/- welding cables extending up to 60 ft. Welders arranged in 8-Rack (blank off 2 unused) & 4 Rack Miller CST 280 System – Welders power needs 480v, 3 phase, 20 amps each welder Brodhead Garrett 526307 booth with movable bench WB 100-5N or Lincoln Equal Provide (1) access compliant station NIEDAX wire mesh cable tray system Must include curtains, tool shelving with torch holders, and working tables with adjustable overhead welding bracket STATE PRODUCT BID _____		
22.	2	10	EA	POWER MIG 215 WELDERS <ul style="list-style-type: none"> Lincoln Model # LWCK2326-1 208v, 3 phase, 50 amps STATE PRODUCT BID _____		
23.	3	2	EA	40 TON SCOTCHMAN HYDRAULIC IRON WORKER ORDER #RE55- 4014TM220 is superseded by <ul style="list-style-type: none"> 40 Ton Scotchman Iron Worker Model # 5014-TM 230v, 3 phase, 10 amps STATE PRODUCT BID _____		

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
24.	4	1	EA	14" FALCON COLD SAW ORDER #R650-F3502MA is superseded by <ul style="list-style-type: none"> 14" Scotchman Cold Saw Model # CPO350PK 230v, 3 phase, 6.5 amps STATE PRODUCT BID _____		
25.	29	1	EA	MULTIPLE SPINDLE 20" VARIABLE SPEED DRILL PRESS STATION ORDER #RF60-2286504 is superseded by <ul style="list-style-type: none"> (Set of 5) 20" Jet Gear Head and Tapping Press Model # GHD-20T 1.5 horsepower 230v, 3 phase, 20 amps STATE PRODUCT BID _____		
26.	6	1	EA	TORCH MATE #4CWC PLASMA OXY FUEL CUTTER <ul style="list-style-type: none"> 5' x 10' Torch Mate XS2 STATE PRODUCT BID _____		
27.	7	10	EA	OXY & ACETYLENE WELDING & CUTTING STATION <ul style="list-style-type: none"> Brodhead Garrett 526315 two station bench (5) reg'd. Victor Deluxe Journeyman 510 torch outfit (6) 282 cf oxygen cylinders (3) 330 cf size 5 acetylene cylinders Must Include: All gauges, welding heads, tips, tanks, etc. Must be fully operational and manifolded upon installation. Secure with Unistrut and chains STATE PRODUCT BID _____		
28.		30	EA	WELDING HELMETS PHANTOM AUTO DARKENING MODEL 29711 ITEM #IN791 is superseded by <ul style="list-style-type: none"> Miller Performance Series Welding Helmet Stock # 241460 STATE PRODUCT BID _____		
29.	10	1	EA	CRAFTSMAN WOOD CUTTING BOARD SAW is superseded by <ul style="list-style-type: none"> The Oliver 24" Band Saw Model # 4665.001 220v, Single Phase, 5 HP STATE PRODUCT BID _____		
30.	11	1	EA	CRAFTSMAN METAL CUTTING BOARD SAW is superseded by <ul style="list-style-type: none"> Kalamazoo 10" Abrasive Cut-Off Saw Model # 12586940 220v, 8.4 amps, 3 horsepower STATE PRODUCT BID _____		

ITEM NO.	PLAN ITEM NO.	QTY.	UNIT	ITEM DESCRIPTION	PRICE	EXTENSION
31.	12	3	EA	MILLER SPECTRUM PLASMA CUTTERS <ul style="list-style-type: none">• Model: Spectrum 875• 208-230/60/1, 50 amps• To each be set at end of cutting table with duct connection STATE PRODUCT BID _____		



Invoice

Remittance Address:

John Deere Government & National Sales
21748 Network Place
Chicago, IL 60673-1217
888-222-7238

Bill To: 2048782

KERN HIGH SCHOOL DISTRICT
5801 SUNDALE AVE
BAKERSFIELD CA 93309

Ship To: 2087899


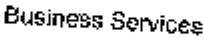
Kern High School District
3701 East Bella Terrace Avenue Ste
Bakersfield CA 93307-6833

Information

Invoice Number	111848436
Invoice Date	04/20/2012
Invoice Due Date	05/21/2012
Payment Terms	Net 30 Days
Purchase Order No.	CON 8195
Reference#	1906188
Sold To	2048782
Servicing Dealer	000S073180
JD FID No.	38-2382580

Page 1 of 4

Invoice Details

Item	Material	Description	Qty/Wt	Unit Price	Amount
0010	3131R	6430 Open Operator Station Tractor	1 PC	56,504.00	56,504.00
		Contract Description:OR #NPP			
		Serial Number: L06430X698176			
0070	7040	PowerQuad 16F/16R Transmission with Mecha	1 PC	3,351.00	3,351.00
		Contract Description:OR #NPP			
0100	7225	1st & 2nd Deluxe SCVs 13 Detent - 301 Se	1 PC	1,245.00	1,245.00
		Contract Description:OR #NPP			
0130	8635	Floor Mat	1 PC	99.00	99.00
		Contract Description:OR #NPP			
0140	9115	Back-Up Alarm	1 PC	462.00	462.00
		Contract Description:OR #NPP			
0150	8850	Toolbox	1 PC	74.00	74.00
		Contract Description:OR #NPP			
<div style="text-align: center;">  <p>RECEIVED MAY 8 2012</p> </div>					
<div style="text-align: center;">  <p>Business Services</p> </div>					

The above items are sold according to the terms on the face and reverse side hereof, including those limiting warranties and sellers liabilities, any federal, state or city sales or use taxes are to be paid by purchaser. The above goods are made in accordance with the Fair Labor Standard Act of 1930, as amended, proof of delivery must be requested within sixty days of invoice date.

Nasco Modesto

Dedicated to Delivery

Celebrating Over
70 years of service
Established 1941

Worldwide Service to Education, Health, Agriculture, and Industry

PO Box 101 Salida, CA 95368-0101

Phone 209-54-s..1600 Fax 209-545-1869 Website www.eNasco.com E-mail modesto@eNasco.com

Pricing Request Number 1201797

May 2, 2012

CONTACT:DAWN VASQUEZ

Bill To 400-278-00 ACCOUNTING 5801 SUNDALE AVE BAKERSFIELD CA 93309	Ship To KERN HIGH SCHOOL DISTRICT ACCOUNTING 5801 SUNDALE AVE BAKERSFIELD CA 93309
--	--

Shipping Instructions:

Special Note:

661/8273100

Cust P/O Number: BLANKET/PRICING

Contract: 10124

Special Remark: SEE EDITING NOTE

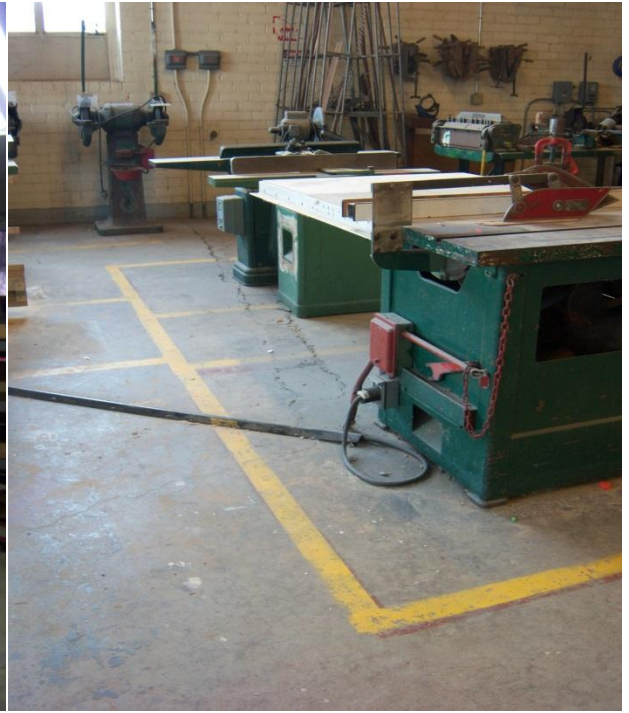
Item Number	Qty	U/M	Description	unit Price	Extended
WA09883	H	5 EA	KITCHENAID MIXER COMERCIAL*D/S* LBS: 160.00	376.740* • (418.600 @ -10%)	1883.70 T
WA09887	H	5 EA	FLAT BEATER LBS: 2.50	*D/S* 15.750* * (17.500 @ -10%)	78.75 T
WA25705	H	5 EA	WIRE WHIP/KITCHENAID MIXER LBS: 3.15	21.600* * (24.000 @ -10%)	108.00 T
WA25706	H	5 EA	DOUGH HOOK/KITCHENAID MIXR LBS: 2.80	21.600* * (24.000 @ -10%)	108.00 T
WA20993	H	5 EA	PASTA ROLLER ATTACHMENT LBS: 40.00	179.955* * (199.950 @ -10%)	899.78 T
W09187	H	5 EA	FOOD GRINDER LBS: 8.75	48.060* * (53.400 @ -10%)	240.30 T
**TOTAL WEIGHT:			217.20	**NET TOTAL	3318.53
				SHIPPING	.00
				TAX AMOUNT	240.59
•This pricing request expires 06/13/2012				TOTAL AMOUNT	\$3559.12

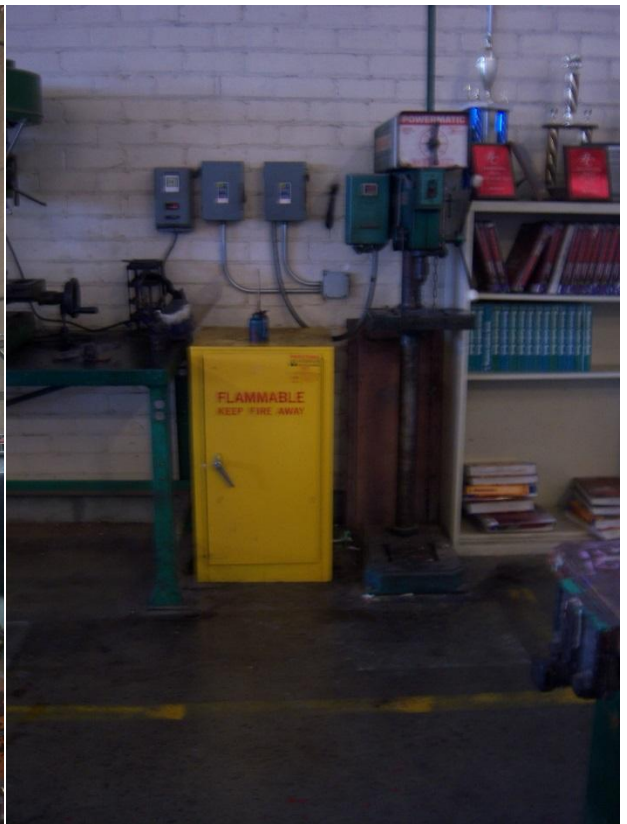
G. Final Remodel Walk Through

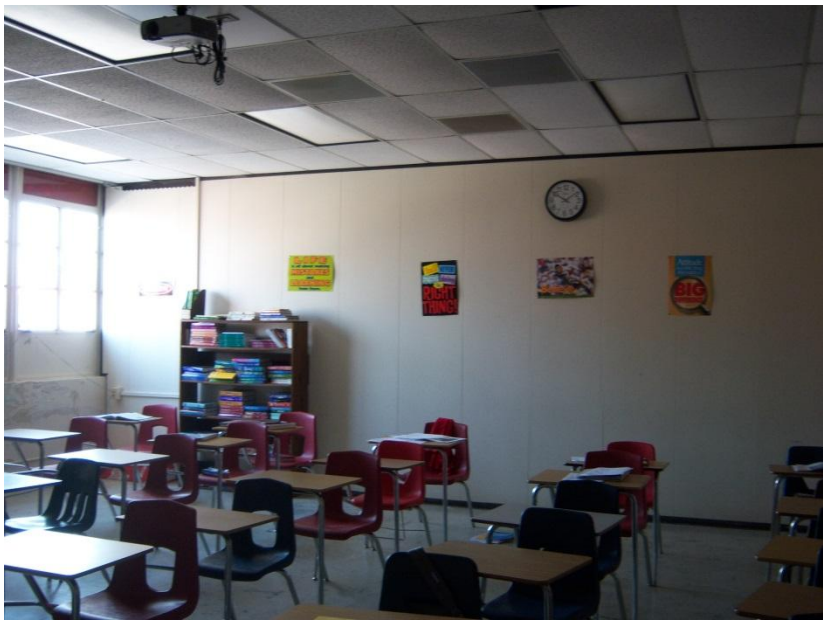
When completion of construction and equipment is installed you will have a walk through. The purpose of the walk through is to identify missing items, unfinished construction, insure all equipment is operating properly, and compile a list of things still needed to do. In my situation the general contractor was let go and district personnel over say the completion of the project which was basically left up to me to check.

When walking through be as thorough as possible look at base boards to the ceiling for unfinished construction. Make sure you have no safety issue with excess electrical cords and the equipment is mounted to the floor and stable because once the class or shop is signed off on "it's your baby". I am still finding things that were not completed or hooked up right, it's extremely hard to go back and get them fixed afterwards. Also keep records of warranties even though all is new you will have warranty issues. Finally after all is taken care of to your satisfaction. Invite your administration, advisory, industry partners, and grant writing team in for tour. Take some pictures for memories and advertising purposes.

H. Remodel Pictures Before

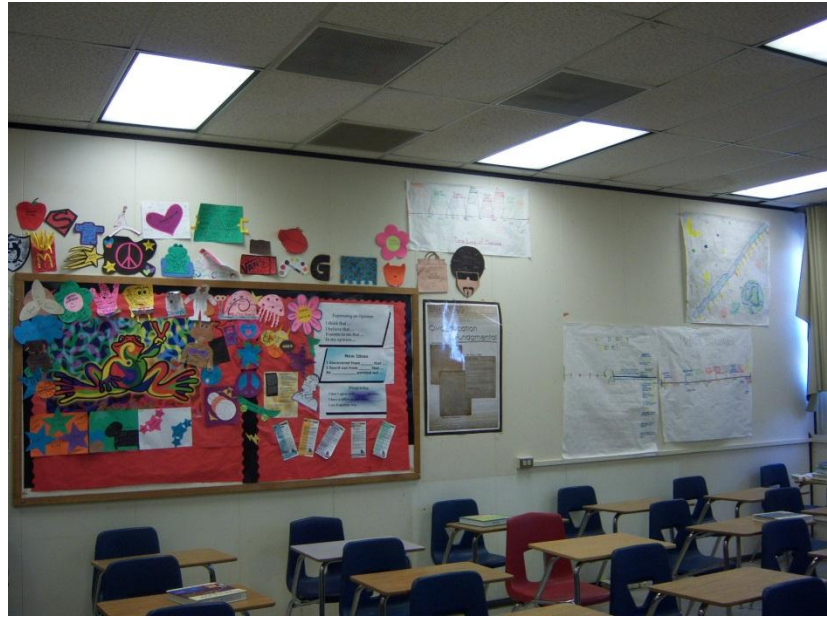


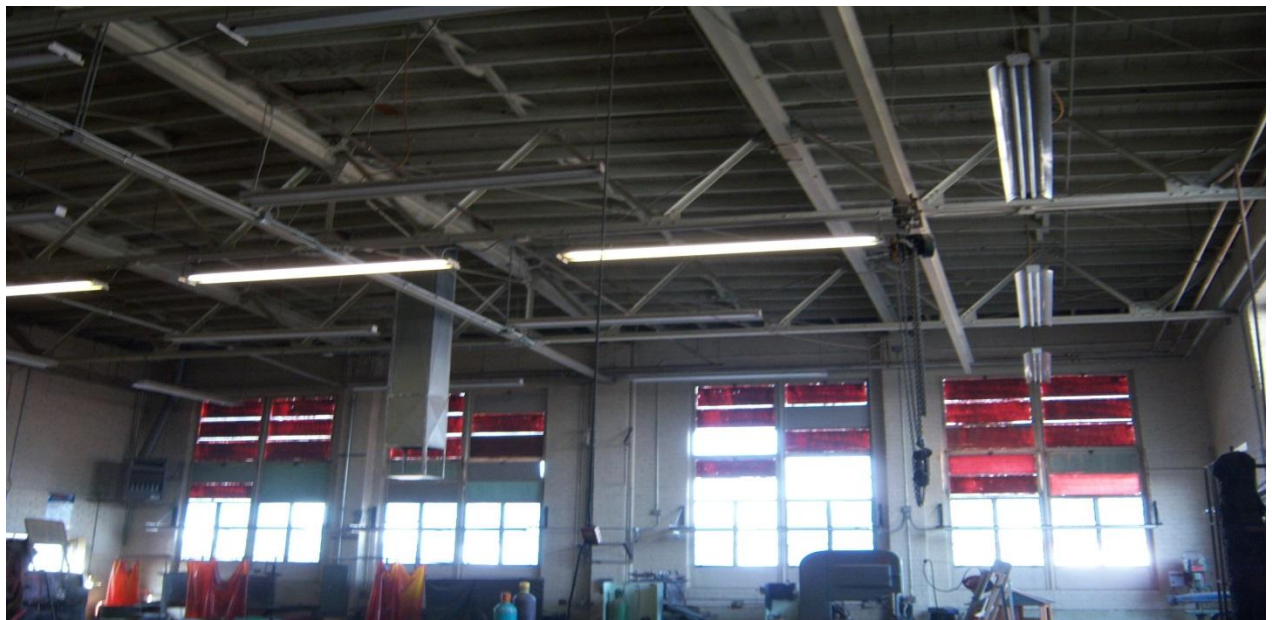












I. Remodel Picture After

J. Conclusion

In conclusion while the remodel of our agriculture facilities was long and arduous filled with setbacks and budget constraints the end result is a state of the art facility that rivals any FFA program in the state of California. The students can now enjoy a facility that allows them to acquire skill sets needed for today's employment in the agriculture field. It also has allowed us to have students attain higher education units while in high school. I personally gained much knowledge in the process and if ever am asked to assist in a large remodel in the future I will be better suited to assist facilities personnel and fellow ag teachers with planning, design, and implementation of plans and construction.

During the Arvin Ag Department remodel I developed a new found appreciation for input from fellow teachers, contractors, administration, and advisory committees. I have learned to rely on others input for the success of my program and students. If one tries to be involved in every minor detail and aspect the project becomes less likely to be successful. In some cases I would miss minor details due to enormity of the task which caused us to lose valuable time correcting the problems.

Lastly I would like to say that during this project you realize that even after you are done with a remodel you still need to create your "five year plan." In my case this plan will include acquiring classroom supplies and materials needed for students to be fully immersed with the new technology that comes with a new facility. Also I would in the future I would like to find grants to remodel our forty acre farm completely which would include installing a restroom facility.