

EL MONTE UNION HIGH SCHOOL DISTRICT ARROYO HIGH SCHOOL - NEW GREENHOUSE

DSA SUBMITTAL

DSA FILE NO. 19-H10

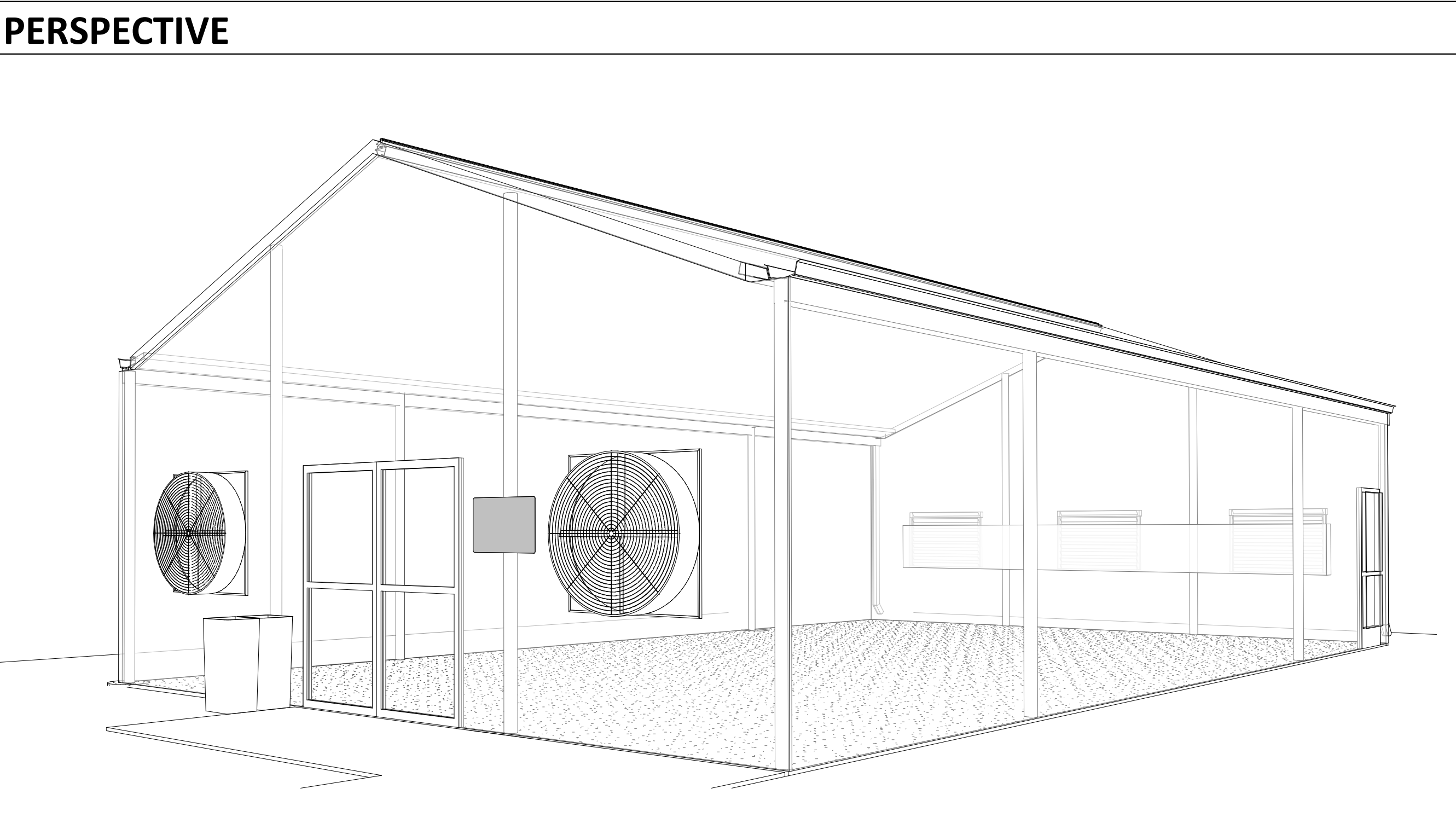
PTN. : 64519-107

DSA APPLICATION NO.: 03-122086

PROJECT DIRECTORY	
OWNER	EL MONTE UNION HIGH SCHOOL DISTRICT 3537 JOHNSON AVENUE, EL MONTE, CA 91731 [T]: 626.444.9005 NORMA MACIAS, OWNERS AUTHORIZED REPRESENTATIVE
ARCHITECT	CSDA DESIGN GROUP 610 E. FRANKLIN AVENUE EL SEGUNDO, CA, 90245 [T] 310.821.9200 MICHAEL R. SCHOEN, PRINCIPAL
MECHANICAL/ ELECTRICAL/ PLUMBING	TX ENGINEERING CORP. 2866 BIRCH LANE POMONA, CA, 91767 [T] 213.295.5532 THOMAS XU, PRINCIPAL
CIVIL / STRUCTURAL	VCA ENGINEERS, INC. 1041 S. GARFIELD AVENUE SUITE #210 ALHAMBRA, CA 91801 [T] 323.729.6098 EDWIN CASTRO

SCOPE OF WORK
<ul style="list-style-type: none"> NEW 24' X 48' MANUFACTURED GREENHOUSE WITH PLANTER BEDS NEW CRUSHED ROCK GROUND SURFACE WITH CONCRETE FOOTINGS TO SUPPORT GREENHOUSE NEW ELECTRICAL EQUIPMENT TO SERVICE GREENHOUSE NEW WATER IRRIGATION PLUMBING TO SERVICE GREENHOUSE NEW ACCESSIBLE WALKWAY TO GREENHOUSE FROM EXISTING WALKWAY
<p>**PER DSA IR A-22 APPENDIX 34, FOOTNOTE 20 & EXEMPTION 2.1.2.2, THE EL MONTE UNION HIGH SCHOOL DISTRICT REQUESTS DSA "ACCESS-ONLY" REVIEW AND ACKNOWLEDGES THE OCCUPIABLE GREENHOUSE WILL NOT BE USED FOR CLASSROOM INSTRUCTION AND NOT APPROVED OR CERTIFIED BY DSA.</p>

DRAWING INDEX	
Sheet Number	Sheet Name
G-001	COVER SHEET - INDEX, SCOPE OF WORK & VICINITY MAP
G-002	GENERAL NOTES, ABBREVIATIONS & SYMBOL LEGEND
G-101	OVERALL CAMPUS SITE PLAN, FLS, & ACCESSIBILITY
C-100	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
C-200	SITE DEMOLITION AND SITE CONTROL PLANS
C-300	SITE GRADING AND SITE UTILITY PLAN
C-400	SITE EROSION PLAN
C-410	EROSION DETAILS
A-001	ENLARGED SITE PLAN - DEMO
A-101	ENLARGED SITE PLAN
A-110	GREENHOUSE FLOOR PLAN
A-111	GREENHOUSE POWER PLAN
A-500	DETAILS - TYPICAL
A-600	SCHEDULES (FOR REFERENCE ONLY)
S-001	GREENHOUSE FOUNDATION PLAN & NOTES
E-001	ELECTRICAL COVER SHEET
E-101	ELECTRICAL SITE PLAN
P-100	PLUMBING LEGEND, NOTES AND SCHEDULE
P-101	PLUMBING SITE PLAN
Grand total: 19	



SITE AREA PERSPECTIVE

STATEMENT OF GENERAL CONFORMANCE

THE DRAWING SHEETS LISTED ON THE SHEET INDEX HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THE STATE OF CALIFORNIA. I HAVE EXAMINED THE DRAWINGS FOR:

(1) DESIGN INTENT AND THEY APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY MYSELF, AND

(2) COORDINATION WITH MY PLANS AND SPECIFICATIONS, AND ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341, AND 4-344" OF TITLE 24, PART 1. [PER TITLE 24, PART 1, SECTION 4-317(B)]

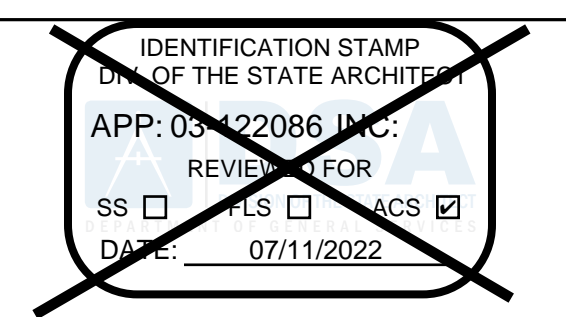
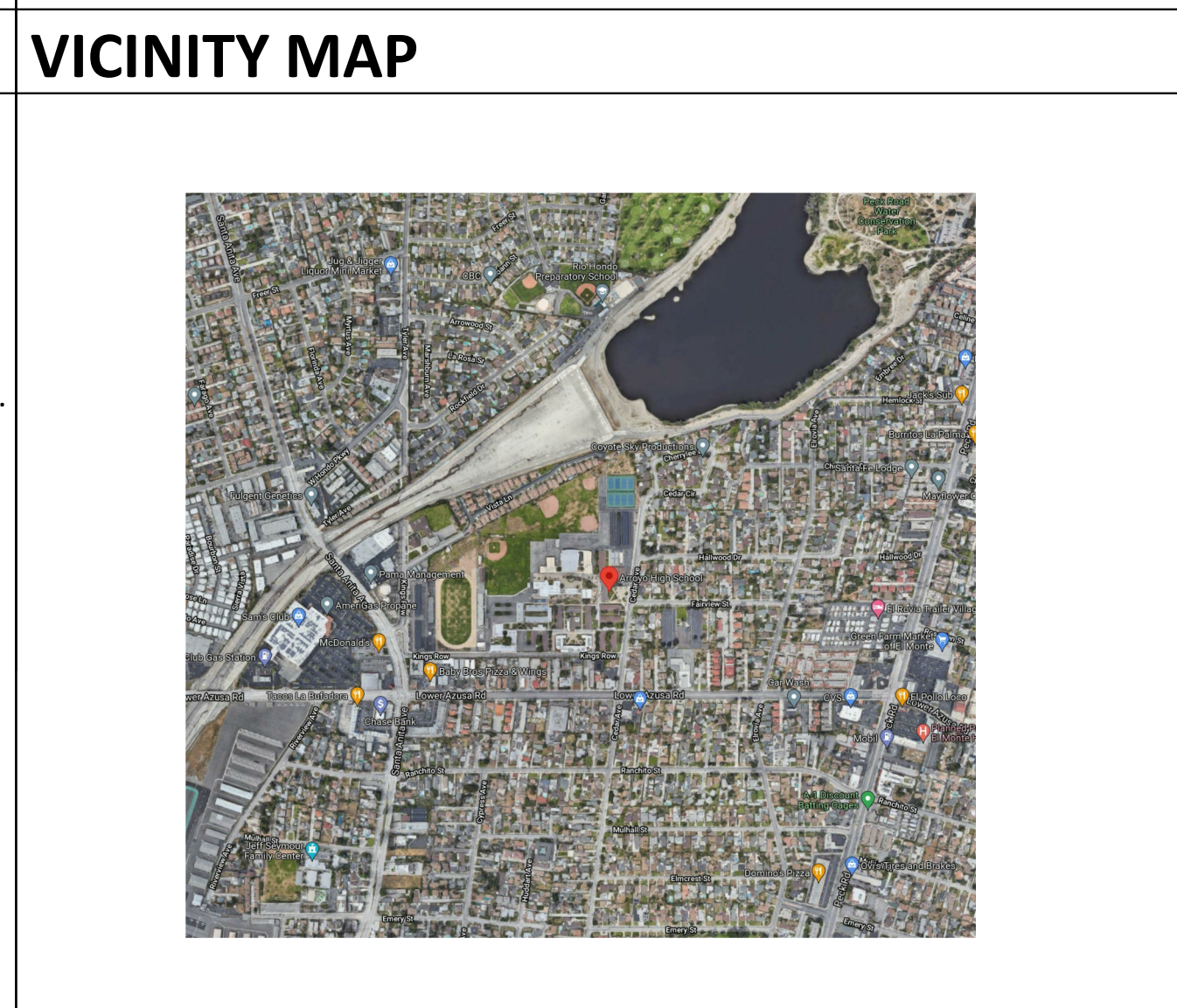
[Signature]

SIGNATURE OF ARCHITECT DESIGNATED TO BE IN RESPONSIBLE CHARGE

MICHAEL R. SCHOEN

ALTERNATE	
1.	ALTERNATE #1 - REMOVE FROM SCOPE NEW 2" WATER CONNECTION AND ASSOCIATED YARD BOX AND VALVES PER DRAWING P-101: INCLUDING KEY NOTES 1 THROUGH 6. PROVIDE A HOSE BIBB NEAR GREENHOUSE WITH ADDITIONAL SHUT-OFF VALVE
2.	ALTERNATE #2 - INTERIOR AQUAPONICS EQUIPMENT PER A-600

APPLICABLE CODES	
THE WORK ON PUBLIC SCHOOL PROJECTS IN CALIFORNIA IS ADMINISTERED AND ENFORCED BY THE DIVISION OF THE STATE ARCHITECT (DSA), INCLUDING THE STRUCTURAL SAFETY SECTION, THE ACCESS COMPLIANCE SECTION, AND THE STATE FIRE MARSHALL.	
1. STATUTORY & JUDICIAL REGULATIONS:	
A. 2019 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.	
B. 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, TITLE 24 C.C.R.	
C. 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3 TITLE 24 C.C.R.	
D. 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.	
E. 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.	
F. 2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.	
G. 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.	
H. 2019 CALIFORNIA REFERENCE STANDARDS, PART 12, TITLE 24 C.C.R.	



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CONSULTANT

CONSULTANT STAMP

PROJECT OWNER:
EL MONTE UNION HIGH SCHOOL DISTRICT

3537 JOHNSON AVENUE,
EL MONTE, CA 91731

PROJECT NAME:
**ARROYO HIGH SCHOOL -
NEW GREENHOUSE**

4921 CEDAR AVE.,
EL MONTE, CA 91732

MARK	DATE	DESCRIPTION
	01/07/22	100% CD SET
	03/03/22	DSA SUBMITTAL
V2		DSA V2 SUBMITTAL

PROJECT NO.: 21075.01
01/07/22

SHEET TITLE:
**COVER SHEET - INDEX,
SCOPE OF WORK &
VICINITY MAP**

SHEET NO.:
G-001

11B-303.3 Beveled.

Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (12.7 mm) high maximum shall be beveled with a slope not steeper than 1:2.

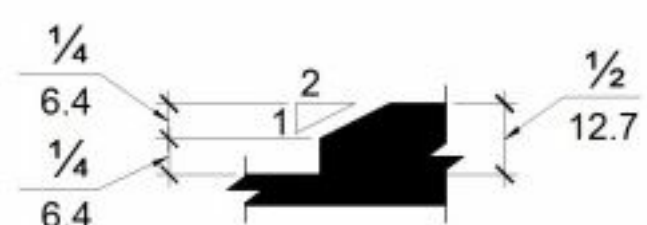
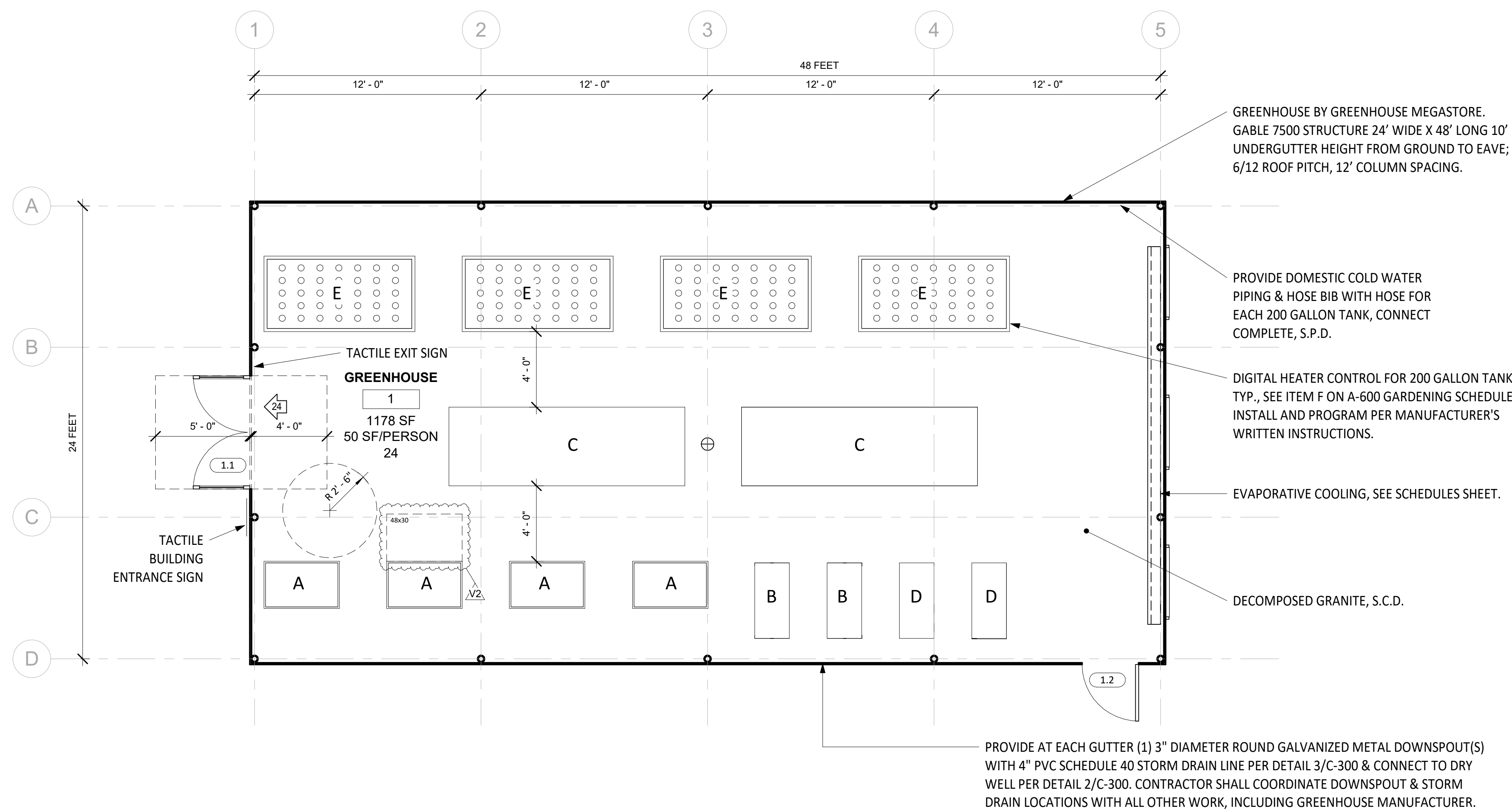


FIGURE 11B-303.3BEVELED CHANGE IN LEVEL

TYPICAL THRESHOLD
SCALE: 12" = 1'-0"



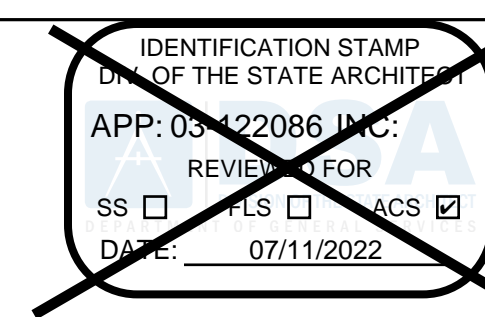
GREENHOUSE FLOOR PLAN
SCALE: 1/4" = 1'-0"

SHEET NOTES

1. FIELD VERIFY ALL DIMENSIONS PRIOR TO WORK.
2. PROTECT ALL EXISTING SITE AND BUILDING ELEMENTS, U.O.N.
3. SEE ELECTRICAL & PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
4. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
5. RELOCATE & SALVAGE EACH BUILT AND NATURE ELEMENTS AS NEEDED TO ACCOMMODATE GREENHOUSE, RETURN TO DISTRICT.
6. SEE SHEET A-600 FOR ADDITIONAL INFORMATION.
7. G.C. TO HIRE ADDITIONAL CONSULTANT AQUAPONIC SOURCE OR APPROVED EQUAL CONSULTANT TO HELP WITH AQUAPONIC EQUIPMENT SOURCING AND INSTALLATION.
8. SEE CIVIL DRAWINGS FOR MORE INFORMATION.

FLOOR PLAN LEGEND

- DOOR TAG, SEE SCHEDULES SHEET
- CATCH BASIN, SEE CIVIL DRAWINGS
- DOOR, SEE SCHEDULES SHEET
- POLYCARBONATE GREENHOUSE, SEE SCHEDULES SHEET
- ADA CLEARANCE
- OCCUPANT LOAD



CSDA DESIGN GROUP

LISTEN COLLABORATE CREATE

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CONSULTANT

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PROJECT OWNER:

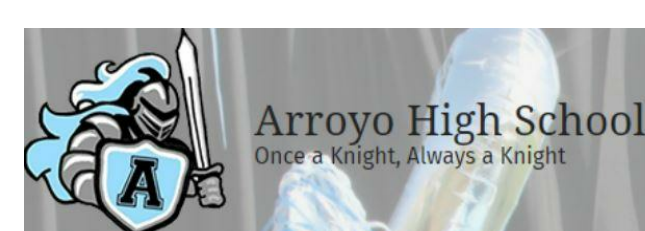
EL MONTE UNION HIGH SCHOOL DISTRICT



3537 JOHNSON AVENUE,
EL MONTE, CA 91731

PROJECT NAME:

ARROYO HIGH SCHOOL - NEW GREENHOUSE



4921 CEDAR AVENUE
EL MONTE, CA 91731

MARK	DATE	DESCRIPTION
	01/07/22	100% CD SET
	03/03/22	DSA SUBMITTAL
V2		DSA V2 SUBMITTAL

PROJECT NO.: **21075.01**
01/07/2022

SHEET TITLE:
GREENHOUSE FLOOR PLAN

SHEET NO.:
A-110

FOR REFERENCE ONLY

DOOR AND FRAME SCHEDULE (VERIFY PRIOR TO BID)

MARK	ROOM NAME	WIDTH	HEIGHT	DOOR				FRAME			FIRE RATING	HARDWARE GROUP	REMARKS
				MAT.	FIN.	MAT.	FIN.	HEAD	JAMB	THRESHOLD			
1.1	GREENHOUSE	6'-0"	6'-8"	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	2/A-110	NONE	PER MANUFACTURER	GREENHOUSE STRUCTURE MFR DOOR & HARDWARE W/ ACCESSIBLE LEVER LOCKSET & THRESHOLD
1.2	GREENHOUSE	3'-0"	6'-8"	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	2/A-110	NONE	PER MANUFACTURER	GREENHOUSE STRUCTURE MFR DOOR & HARDWARE W/ ACCESSIBLE LEVER LOCKSET & THRESHOLD

GARDENING EQUIPMENT (I.E. GROWING SYSTEMS)

MARK	NAME	MANUFACTURER, OR APPROVED EQ. PRIOR TO BID	QUANTITY	MODEL NO., OR APPROVED EQUAL PRIOR TO BID	COMMENTS
A	MESA MINICAMP GRANDE (HYDROPONICS TABLE)	GREENHOUSE MEGASTORE, ETC.	4	HP-NG-MM	FURNISH, INSTALL, CONNECT COMPLETE, COORDINATE, PROGRAM, ETC., W/ MANUF.
B	MINICAMP VERTICAL JARDANIA RACK	GREENHOUSE MEGASTORE, ETC.	2	HP-NG-MJ	FURNISH, INSTALL, CONNECT COMPLETE, COORDINATE, PROGRAM, ETC., W/ MANUF.
C	MICROGREEN RACK	GREENHOUSE MEGASTORE, ETC.	2	HP-CKMG	FURNISH, INSTALL, CONNECT COMPLETE, COORDINATE, PROGRAM, ETC., W/ MANUF.
D	AQUILLA RED CEDAR POTTING BENCH	GREENHOUSE MEGASTORE, ETC.	2	BN-2000	FURNISH, INSTALL, CONNECT COMPLETE, COORDINATE, PROGRAM, ETC., W/ MANUF.
E	AQUAPONICS SYSTEM WITH 200 GALLON TANK	GREENHOUSE MEGASTORE, ETC.	4	HP-CKAP	FURNISH, INSTALL, CONNECT COMPLETE, COORDINATE, PROGRAM, ETC., W/ MANUF.
F	TRUE TEMP - DIGITAL HEATER CONTROL	AQUAPONIC USA, ETC.	4	T3-300	FURNISH, INSTALL, CONNECT COMPLETE, COORDINATE, PROGRAM, ETC., W/ MANUF.

GREENHOUSE BUILDING EQUIPMENT (**PROVIDE ADDITIONAL EQUIPMENT NOT LISTED, SEE SHEET NOTES & GREENHOUSE MEGASTORE)

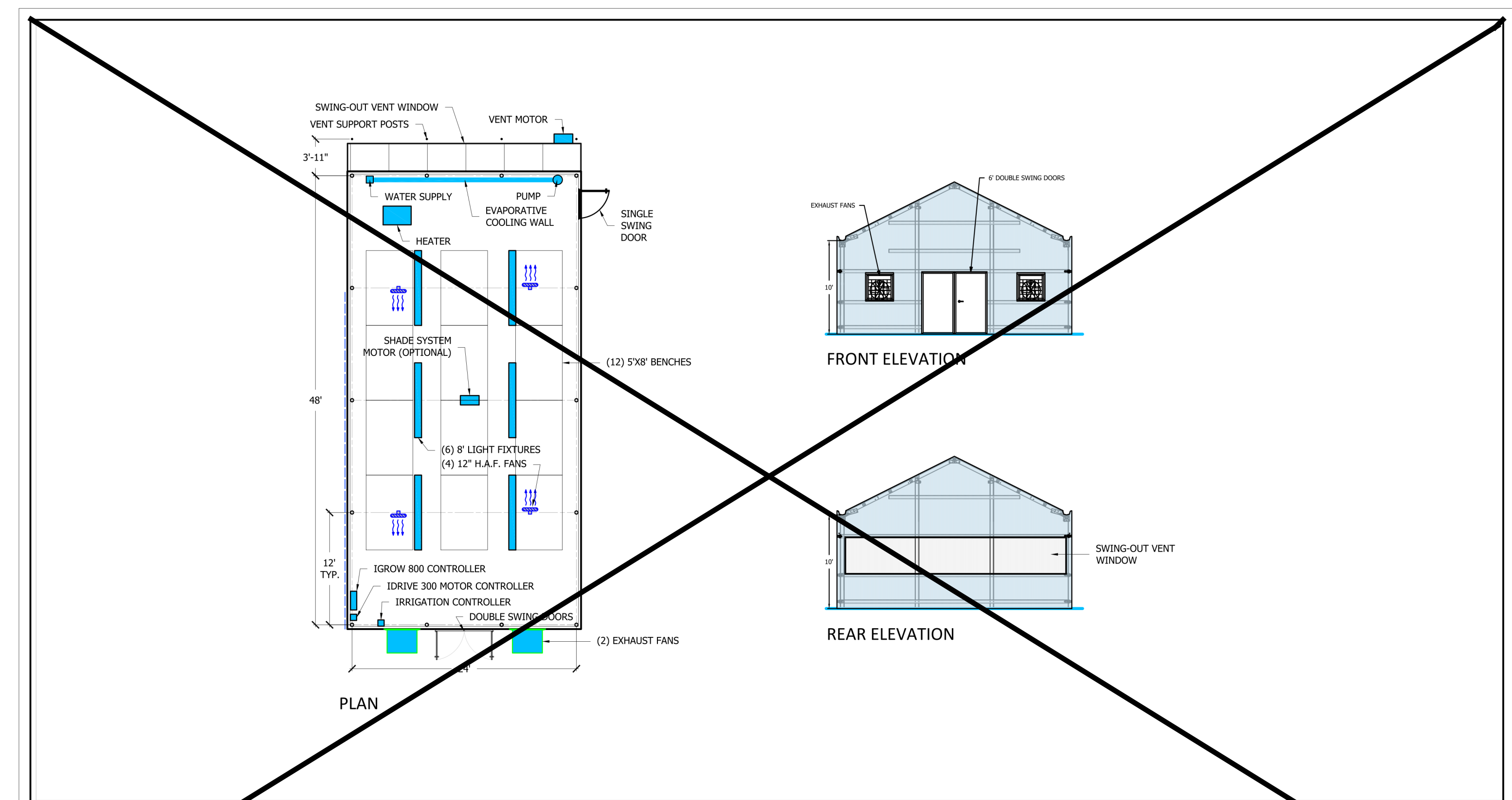
PRODUCT DESCRIPTION	QUANTITY	MODEL NO.	MEASUREMENT	AMPERAGE	VOLTAGE	WEIGHT	CFM	MANUFACTURER
J&D TYPHOON EXHAUST FAN	2	VNS305850	30"	6.2/3.1	115/230	750+/-	NA	MEGASTORE, CONLEY'S, APPROVED EQ. MANUFACTURER (MAY COME WITH GREENHOUSE)
ALUMINUM SHUTTER	4	VRS648A	48.5"X48.5	NA	NA	NA	9,000	MEGASTORE, CONLEY'S, APPROVED EQ. MANUFACTURER (MAY COME WITH GREENHOUSE)
HORIZONTAL AIR FANS	4	VK12	12"	1.7/0.85	115/230	18	1,470	MEGASTORE, CONLEY'S, APPROVED EQ. MANUFACTURER (MAY COME WITH GREENHOUSE)
IGROW 800 ENVIRONMENTAL CONTROLLER	1	CT-4108	4"X6"	NA	NA	5+/-	NA	MEGASTORE, CONLEY'S, APPROVED EQ. MANUFACTURER (COORDINATE WITH MAN.)
STAINLESS STEEL EVAPORATIVE COOLING PADS	1	EV-556	20'-0" X 4'-0"	NA	NA	NA	NA	MEGASTORE, CONLEY'S, APPROVED EQ. MANUFACTURER (COORDINATE WITH MAN.)

SHEET NOTES

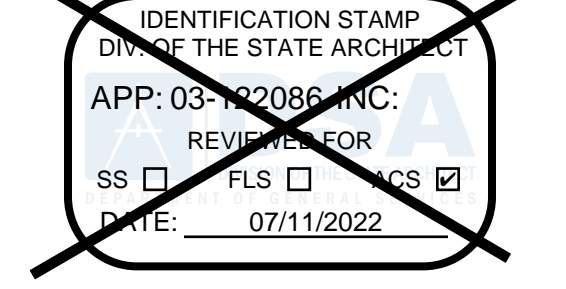
- SEE SHEET G-001 FOR SHEET INDEX, ETC.
- SEE GREENHOUSE FLOOR PLAN SHEET.
- SEE GREENHOUSE POWER PLAN SHEET.
- SEE SKETCH GM1 BY GREENHOUSE MEGASTORE.
- PROVIDE GREENHOUSE, INCLUDING ALL EQUIPMENT, COMPONENTS, ACCESSORIES, DEVICES, ETC., BY GREENHOUSE MEGASTORE (U.O.N.) & THEIR ASSOCIATED MANUFACTURERS, OR SUBMIT AN EQUAL PRODUCT FOR REVIEW PRIOR TO BID, TYP. CONTRACTOR SHALL COORDINATE WITH THE GREENHOUSE MANUFACTURER ON ALL EQUIPMENT, ACCESSORIES, DEVICES, ETC., THAT REQUIRE MECHANICAL, ELECTRICAL, AND PLUMBING CONNECTIONS FOR COMPLETE INSTALLATION. ALL LABOR, MATERIAL, ETC., ASSOCIATED WITH THIS WORK IS PART OF THIS CONTRACT AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- OMIT (12) BENCHES.
- PROVIDE THE FOLLOWING (TO BE SELECTED BY ARCHITECT) FROM THE GREENHOUSE MEGASTORE'S FULL CATALOG (AVAILABLE ONLINE) & THEIR ASSOCIATED MANUFACTURERS, INCLUDING ALL LABOR, MATERIAL, ETC., FOR COMPLETE INSTALLATION (OR SUBMIT AN EQUAL PRODUCT FOR REVIEW PRIOR TO BID), TYP.:
 - LED LIGHTING
 - SHADE SYSTEM
 - HEATING
 - EVAPORATIVE COOLING SYSTEM
 - CONTROLLERS
 - FANS
 - MOTORS
 - IRRIGATION
 - OPENINGS
 - ETC.
- ALL DOOR HARDWARE SHALL MEET REQUIREMENTS OF THE CALIFORNIA BUILDING CODE CHAPTER 11B. SEE CODE SPECIFICATION SECTION 08.71.00, FOR REFERENCE ONLY.
- PROVIDE TYP. THRESHOLD AT EACH DOOR, SEE GREENHOUSE FLOOR PLAN SHEET.
- PROVIDE CIRCUITS, WIRING, RIGID METAL CONDUITS, BOXES, ETC., GALVANIZED & SPECIFIED FOR EXTERIOR WET AREAS & FOR COMPLETE CONNECTION OF ALL EQUIPMENT, ACCESSORIES, DEVICES, SWITCHES, OUTLETS, ETC., TYP.

GREENHOUSE MEGASTORE

- PROJECT DETAILS
 - SENIOR TEACHING PACKAGE GABLE SERIES GREENHOUSE
 - 1,152 SQUARE FEET GROWING SPACE
- BUILDING DESCRIPTION
 - GREENHOUSE STAND ALONE
 - GABLE 7500 STRUCTURE 24' WIDE X 48' LONG 10' UNDERGUTTER HEIGHT FROM GROUND TO EAVE; 6/12 ROOF PITCH, 12' COLUMN SPACING
 - POST-IN-PIER COLUMN INSTALLATION
 - SIDEWALLS AND GABLE END FRAMING AND GABLE FLASHING.
 - ALUMINUM EXTRUSIONS AND FASTENERS FOR 8MM TWINWALL POLYCARBONATE FOR GABLE ENDS AND SIDE WALLS.
 - ALUMINUM EXTRUSIONS AND FASTENERS FOR 8MM TWIN WALL POLYCARBONATE ROOF
 - (1) CONTINUOUS END WALL VENT BEHIND EVAPORATIVE COOLING WALL FRAMING FOR TWO (2) EXHAUST FANS, ONE (1) SINGLE SWING DOORS, ONE (1) DOUBLE SWING DOOR.
 - HEATER HANGER KIT
 - GUTTER END CAP AND TWO (2) GUTTER END CAPS W/ DOWNSPOUT TRANSITIONS.
- DESIGN LOADS/ENGINEERING
 - GREENHOUSE STRUCTURE LOAD RATINGS REQUIRED FOR ENGINEERING, ENGINEERED CALCULATIONS AND DRAWING WITH CA STATE ENGINEERS STAMP.
- COVERING
 - SUFFICIENT 8MM CLEAR TWIN WALL POLYCARBONATE STRUCTURED SHEETS TO COVER GABLE END WALLS, SIDE WALLS, AND ROOF OF GREENHOUSE AREA
- HEATING
 - MODINE HER 200 ELECTRIC HEATER, POWER OPTIONS BELOW.
 - 208V 3 PHASE / 56.8 AMPS
 - 240V 3 PHASE / 49.4 AMPS
 - 480V 3 PHASE / 25.3 AMPS
- AIR CIRCULATION
 - (4) HORIZONTAL AIR FLOW (HAF) FANS 12"
- COOLING
 - (2) 30" EXHAUST FANS WITH SLOP WALL HOUSING
 - (1) 36" TALL X 6" THICK X 24' WIDE EVAPORATIVE COOLING WALL COMPLETE WITH PUMP AND RESERVOIR
 - (1) CONTINUOUS END WALL VENT WITH EXTERNAL RACK & PINION AND MOTOR
- DOORS
 - (1) PLYCO 3' WIDE SINGLE SWING DOOR WITH ADA SILL & LOCKSET
 - (1) PLYCO 6' WIDE DOUBLE STEEL DOOR WITH ADA SILL & LOCKSET
- CONTROLS
 - (1) LINK4 FULLY PROGRAMMABLE CONTROLLER WITH INTEGRATED CONTACTOR CABINET, TEMP/HUMIDITY SENSORS AND DRAWINGS. ACCESSED FROM THE CLOUD.
- INTERIOR AUTO SHADE SYSTEM
 - SLOPE/FAN/SLOPE INTERIOR AUTOMATED SHADE SYSTEM WITH MOTOR. CONTROLLED BY GREENHOUSE CONTROLLER
- LIGHTING
 - (6) 8' LONG - 6 BULB LED LIGHTS FOR GENERAL LIGHTING
- IRRIGATION
 - FILTER, WATER PRESSURE REGULATOR, SOLENOIDS, MULTI STAGE CONTROLLER, TUBING, FITTINGS FOR OVERHEAD MISTING DELIVERY. INCLUDES LINK4 IRRIGATION CONTROLLER WITH 8 CHANNELS. ACCESSED FROM THE CLOUD.
- SEE SKETCH GM1 FOR MORE INFORMATION.



DRAWING TITLE: GREENHOUSE FOUNDATION PLAN & DETAIL
 JOB NAME: EL MONTE SCHOOL DISTRICT
 Greenhouse Megastore
 a division of International Greenhouse Company
 JOB - 6-14-22
 DATE: 6-14-22
 REV. -
 SHEET: GM1



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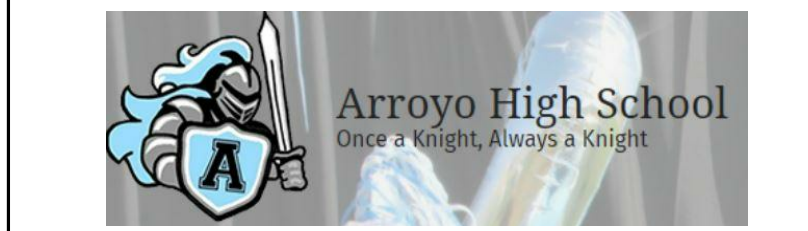
PROJECT OWNER:
 EL MONTE UNION HIGH SCHOOL DISTRICT



3537 JOHNSON AVENUE,
 EL MONTE, CA 91731

PROJECT NAME:

ARROYO HIGH SCHOOL - NEW GREENHOUSE



4921 CEDAR AVENUE
 EL MONTE, CA 91731

MARK	DATE	DESCRIPTION
	01/07/22	100% CD SET
V2	03/03/22	DSA SUBMITTAL
		DSA V2 SUBMITTAL

PROJECT NO.: 21075-01
 01/07/2022

SHEET TITLE:

SCHEDULES

SHEET NO.:

A-600