Madera Unified School District

1902 Howard Road, Madera, CA 93637
559.675.4500
Fax: 559.675.1186
www.madera.k12.ca.us

February 26, 2025

Addendum No.1 Bid No.020325-Madera South H.S. Football Scoreboard Replacement

NOTICE TO ALL VENDORS:

This addendum is attached to and made a part of the above-entitled specifications for Madera Unified School District for Bid No.020325-Madera South H.S. Football Scoreboard Replacement, with a Bid Turn in date of March 4, 2025 @ 10:00:00 am
All changes and/or clarifications will appear in bold type and deletions will be struck out within a sentence.

Clarification/Questions:

See attached

Signature: _____

Date: _____

Todd Lile
Superintendent

Board of Trustees
Ray G. Siebert, President
Ruben Mendoza, Clerk
Nadeem Ahmad
Israel Cortes
Gladys A. Diebert
Joetta Fleak
Lucy Salazar

WE BELIEVE

Madera South High School: Football Scoreboard Replacement: Bid No. 020325

Pre-Bid RFI Log

	Question	Response
1	Is the contractor responsible for demo of the existing scoreboard? If so, please specify extents/scope.	Yes, the contractor is responsible for the removal of the existing scoreboard. The contractor is also responsible to make sure that the soils are recompacted sufficiently to meet installation specs for the new scoreboard. Any concrete demolition should be taken to nearest expansion joint.
2	Is the Scoreboard/Video Board being provided and installed by the scoreboard manufacturer?	Yes, the scoreboard/video board are owner furnished owner installed.
3	Are the solar attachments required for this project? If so, will it be provided and installed by the scoreboard manufacturer or will the GC need to fabricate and install?	The solar attachments are not part of this scope.
4	Is the speaker attachment required for this project? If so, will it be provided and installed by the manufacturer or will the GC need to fabricate and install?	No speaker attachment is required for this project.
5	Is the decorative truss required for this project? If so, will it be provided and installed by the manufacturer or will the GC need to fabricate and install?	The decorative truss is not part of the scope of this project.
6	Will the previous bid RFI's be issued as an addendum?	Please see below.
7	Previous bid RFI 1 required contractor to demo the scoreboard. Please provide as-builts of existing scoreboard foundation.	See attached drawings for reference.
8	Agreement Between Owner and Contractor, Article 11 requires GL limits of $5,000,000.00 each occurrence, $10,000,000.00 aggregate and auto liability of $5,000,000.00 each accident. This seems excessive are these limits accurate?	The insurance requirements are correct.

Previous requests for information		
A	Please provide geotechnical report for determination of existing soil conditions and cohesion.	No Geotech report was needed due to scope of project and code minimums were used in DSA approved PC plans.
B	Sheet SP-1 detail10 shows 3' between the scoreboard and the video display, is this for speaker installation? If so, who is installing them?	Yes, this area is for future speakers which are owner furnished, owner installed.
C	Are we to provide HSS steel supports under this contract?	Contractor is responsible for supplying and installing the lateral boards and attachment shown in detail K on sheet SB5.2 as part of this contract.
D	Sheet SB0.1 Table A shows an add board (ADO-24-3), is this supposed to be installed In the 3' space between the scoreboard and video display, If so, who's installing?	This is owner furnished owner installed.
E	The engineers estimate seems low if the contractor is installing the scoreboard and video display board. Please confirm that installation of Owner furnished scoreboard and video display board is part of this contract.	No, owner furnished scoreboard and video display are owner furnished and owner installed.
F	Sheet SB5.1 details G & E shows solar panel and dome bracing installation, are these required?	No solar panel(s) or dome bracing.
G	Sheet SB.2 "Three Column Assembly" schedule requires heavier columns if flags are installed. Are flags being installed? If so, who's providing and installing?	No flags
H	Sheet SB5.3 detail C shows installation of aluminum truss. This would exceed the 23'-6" max height shown on sheet SP-1 detail 10. Is installation of the truss in this contract?	No truss
I	Will demo or installation of site concrete be required, if so, please provide details, grades, and extents.	Yes, concrete demolition will be required to remove the existing scoreboard and to establish pathway to nearest in-ground power and signal boxes. Any concrete demolition should be taken to nearest expansion joint.
J	Please provide accessible route for heavy equipment and site access.	See attached image.
K	Is the scoreboard being installed by the manufacturer?	Yes, the scoreboard is owner furnished and owner installed.
L	Is the truss option being utilized for this project?	No truss

M	Will the lateral board attachment on sheet SB5.2, detail K be installed by contractor or scoreboard manufacturer?	Contractor is responsible for supplying and installing the lateral board attachment shown in detail K on sheet SB5.2 as part of this contract.
N	Will the solar panel, speaker and video board attachment on page SB5.1. detail G, K, F, and J be utilized in this project? If so, provided and installed by whom?	No solar panel(s); no speakers; yes to the video board. Contractor shall supply brackets for video board(s) that are detailed in diagrams J and K on sheet SB5.1. Video board installation shall be accomplished by owner/scoreboard manufacturer.

Work site access
MSHS Driveway
MSHS Driveway
MSHS Driveway
MSHS Driveway

Harris Electric

RESIDENTIAL • COMMERCIAL • INDUSTRIAL

T.N.J. ELECTRIC, INC.
License No. 505816

LETTER OF TRANSMITTAL

TO: . M U S D DATE: 7/09/07

ATTN:

WE ARE SENDING YOU: PROJECT – MADERA SO. CAMPUS SCOREBOARDS

COPIES	DATE	NO.	DESCRIPTION
2			GUARANTEES
1			AS-BUILTS

THESE ARE TRANSMITTED AS CHECKED BELOW:

FOR REVIEW & APPROVAL	FOR YOUR USE	AS REQUESTED	FOR REVIEW & COMMENT
_____	X	_____	_____

REMARKS:

SIGNED: *SHERRY DUNNING*

4679 N. El Capitan • Fresno, California 93722 • (559) 271-0970 • FAX (559) 271-0580

Harris Electric

RESIDENTIAL • COMMERCIAL • INDUSTRIAL

T.N.J. ELECTRIC, INC.
License No. 505816

GUARANTEE

TO: **MADERA UNIFIED SCHOOL DISTRICT**

The undersigned hereby guarantees that the **ELECTRICAL,** which we have furnished and /or installed for the **MADERA SOUTH CAMPUS SCOREBOARDS, MADERA, CA.** has been performed in strict accordance with the drawings and specifications, and that the work performed and/or the materials furnished will fulfill the requirements of those drawings and specifications. The undersigned agrees to repair or replace, or cause to be repaired or replaced, any or all of its workmanship or materials which may prove to be defective, together with any adjacent work which requires repair or replacement because of our defective work, or a defect in our material, within a period of one (1) year from the date of Final Acceptance of the above mentioned project by the Owner, ordinary wear and tear and unusual abuse or neglect expected.

If we fail to comply with the above paragraph within 10 days after receipt of written notice to perform from the Owner, or fail to pursue such compliance with diligence, we, jointly and severally, do hereby authorize the Owner to proceed to have the defects repaired and made good at our sole expense, and we will honor and pay, upon demand, the costs and charges for such repairs, together with interest at the maximum rate allowed by law. If legal action is initiated to enforce the terms of this Guarantee, the prevailing party shall be entitled to recover reasonable attorney's fees.

DATED: 7/09/07

TNJ ELECTRIC, INC. dba Harris Electric

BY: Tim Bremer
Tim Bremer, President

4679 N. El Capitan • Fresno, California 93722 • (559) 271-0970 • FAX (559) 271-0580

Harris Electric

RESIDENTIAL • COMMERCIAL • INDUSTRIAL

T.N.J. ELECTRIC, INC.
License No. 505816

GUARANTEE

TO: **MADERA UNIFIED SCHOOL DISTRICT**

The undersigned hereby guarantees that the **ELECTRICAL,** which we have furnished and /or installed for the **MADERA SOUTH CAMPUS SCOREBOARDS, MADERA, CA.** has been performed in strict accordance with the drawings and specifications, and that the work performed and/or the materials furnished will fulfill the requirements of those drawings and specifications. The undersigned agrees to repair or replace, or cause to be repaired or replaced, any or all of its workmanship or materials which may prove to be defective, together with any adjacent work which requires repair or replacement because of our defective work, or a defect in our material, within a period of one (1) year from the date of Final Acceptance of the above mentioned project by the Owner, ordinary wear and tear and unusual abuse or neglect expected.

If we fail to comply with the above paragraph within 10 days after receipt of written notice to perform from the Owner, or fail to pursue such compliance with diligence, we, jointly and severally, do hereby authorize the Owner to proceed to have the defects repaired and made good at our sole expense, and we will honor and pay, upon demand, the costs and charges for such repairs, together with interest at the maximum rate allowed by law. If legal action is initiated to enforce the terms of this Guarantee, the prevailing party shall be entitled to recover reasonable attorney's fees.

DATED: 7/09/07

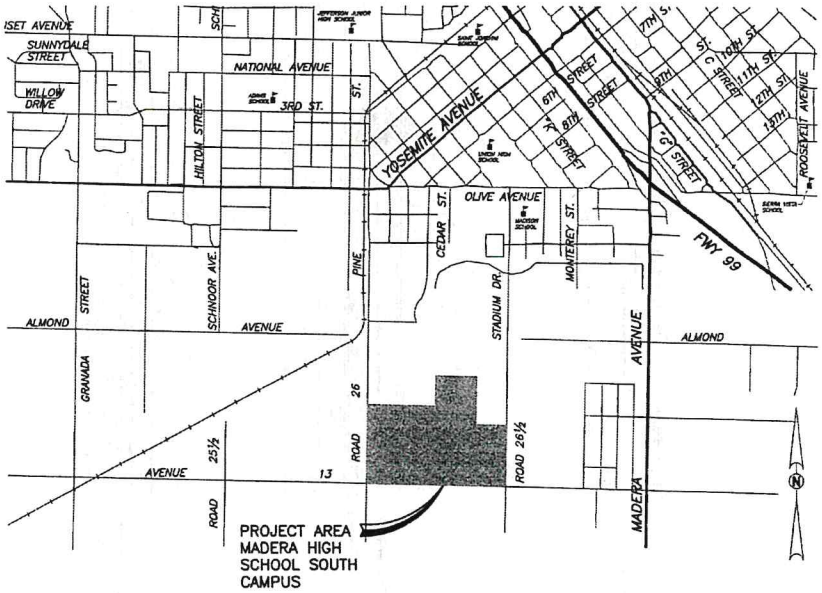
TNJ ELECTRIC, INC. dba Harris Electric

BY: Tim Bremer
Tim Bremer, President

4679 N. El Capitan • Fresno, California 93722 • (559) 271-0970 • FAX (559) 271-0580

MADERA UNIFIED SCHOOL DISTRICT

PLANS FOR THE CONSTRUCTION OF SCOREBOARD IMPROVEMENTS AT MADERA HIGH SCHOOL SOUTH CAMPUS



LOCATION MAP

N.T.S.

Project: Scoreboard Improvements for Madera High School South Campus
DSA application # 02-108416

STATEMENT FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS (INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS) PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

These drawings and/or specifications and/or calculations for the items listed below have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. These documents have been examined by me for design intent and have been found to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me.

The items listed below have been coordinated with my plans and specifications and are acceptable for incorporation into the construction of this project for which I am the individual designated to be in general responsible charge (or for which I have been delegated responsibility for this portion of the work.)

List items reviewed and accepted. (For drawings, a list of all accepted drawings are to be attached.)

Sheet no. 2 of 5, Structural details

Structural calculations, soil report & scoreboard submittal booklet

W Wong
Signature of the Architect/Engineer — Date: 11-03-2006

Warwick K. Wong, PE, Principal
2H Engineering Corporation

E15725 — License Number
09-08-2008 — Expiration Date

DIVISION OF THE STATE ARCHITECT APPLICABLE CODES AND STANDARDS

CODES:

1990 CALIFORNIA CODE OF REGULATIONS, TITLE 19, PUBLIC SAFETY EFFECTIVE APRIL 1, 1990.

2001 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24 PART 1. EFFECTIVE JANUARY 3, 2003

2001 CALIFORNIA BUILDINGS CODE, TITLE 24, PART 2 VOLUME 1 EFFECTIVE NOVEMBER 1, 2001

2001 CALIFORNIA BUILDINGS CODE, TITLE 24, PART 2 VOLUME 2 EFFECTIVE NOVEMBER 1, 2002

1997 UNIFORM BUILDINGS CODE, VOLUME 3 EFFECTIVE NOVEMBER 1, 2002

2004 CALIFORNIA ELECTRICAL CODE, TITLE 24, PART 3 EFFECTIVE AUGUST 1, 2005

2001 CALIFORNIA MECHANICAL CODE, TITLE 24, PART 4 EFFECTIVE NOVEMBER 1, 2002

2001 CALIFORNIA PLUMBING CODE, TITLE 24, PART 5 EFFECTIVE NOVEMBER 1, 2002

2001 CALIFORNIA ENERGY CODE, TITLE 24, PART 6 EFFECTIVE NOVEMBER 1, 2002

2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE, TITLE 24, PART 7 EFFECTIVE NOVEMBER 1, 2002

2001 CALIFORNIA HISTORICAL CODE, TITLE 24, PART 8 EFFECTIVE NOVEMBER 1, 2001

2001 CALIFORNIA FIRE CODE, TITLE 24, PART 9 EFFECTIVE NOVEMBER 1, 2002

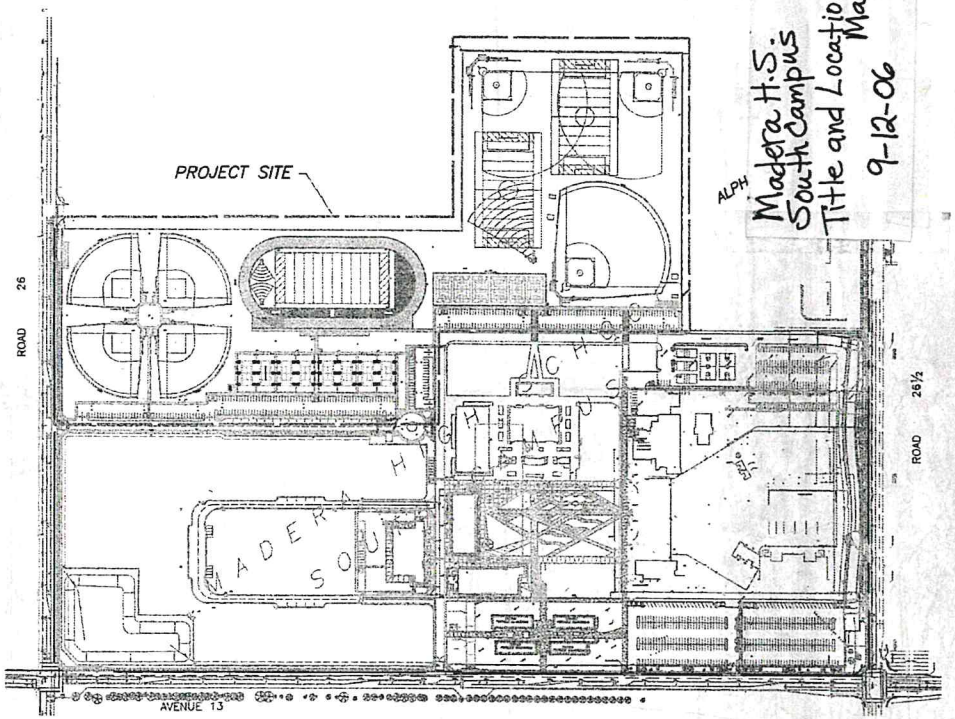
2001 CALIFORNIA CODE FOR BUILDING CONSERVATION, TITLE 24, PART 10 EFFECTIVE NOVEMBER 1, 2002

2001 CALIFORNIA REFERENCED STANDARDS CODE, TITLE 24, PART 12 EFFECTIVE NOVEMBER 1, 2002

STANDARDS AND GUIDES:

NFPA 72, NATIONAL FIRE ALARM CODE 1999 EDITION WITH CALIFORNIA AMENDMENTS.

POLICY #93-03, FIRE AND LIFE SAFETY, DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICE.



SITE MAP

N.T.S.

2H Engineering Corporation
Professional Engineers
2305 E. ASHLAN
FRESNO, CA 93726
(559) 222-6853
Fax (559) 222-6855
email: ahcc@2hengineering.com

File No. 20-03
02 108416
SEI Stephen Ito

TABLE OF CONTENTS

SHEET NO.	TITLE
1.	TITLE AND LOCATION MAP
2.	STRUCTURAL DETAILS
3.	PARTIAL ELECTRICAL SITE PLAN
4.	PARTIAL ELECTRICAL SITE PLAN
5.	ELECTRICAL NOTES & DETAILS

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

Blair, Church & Flynn
CONSULTING ENGINEERS

CONSULTANT	REF. & REV.	MADERA UNIFIED SCHOOL DISTRICT
Blair, Church & Flynn Consulting Engineers, 400 Clovis Avenue, Suite 204, Clovis, California 93612, Tel. (559) 326-1400, Fax. (559) 326-1405		SCOREBOARD IMPROVEMENTS AT MADERA HIGH SCHOOL SOUTH CAMPUS TITLE AND LOCATION MAP

DR. BY: AH
CH. BY: KS
DATE: 06-12-06
SCALE: AS NOTED
SHEET NO. 1 OF 5 SHEETS

GENERAL

1. VERIFICATION: VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. CONFLICTS: NOTES AND DETAILS ON THE DRAWINGS TAKE PRECEDENCE OVER THE GENERAL NOTES IN THE CASE OF CONFLICT.

3. CODES: ALL MATERIALS AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1 & 2, 2001 CALIFORNIA BUILDING CODE.

4. CONDUIT & SLEEVES: CONDUIT & SLEEVES SHALL NOT BE PLACED IN SLABS, FOOTING OR STRUCTURE BEAMS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS. STRUCTURAL MEMBERS SHALL NOT BE CUT OR MODIFIED UNLESS PRIOR APPROVAL IN WRITING IS OBTAINED FROM THE STRUCTURAL ENGINEER.

5. EXCAVATIONS: TAKE ALL NECESSARY PRECAUTIONS TO LOCATE AND PROTECT ANY UNDERGROUND OR CONCEALED CONDUIT, PLUMBING OR OTHER UTILITIES WHERE NEW WORK IS BEING PERFORMED.

6. PROJECT SAFETY AND CONSTRUCTION METHODS: CONTRACTOR/INSTALLER SHALL INSURE THAT THE STRUCTURE IS SAFE DURING ALL PHASES OF INSTALLATION. MAINTAIN NECESSARY BRACING, SCAFFOLDING AND OTHER MEASURES TO INSURE THE INTEGRITY OF THE STRUCTURE AND SAFETY OF INSTALLERS. THE OWNER, ARCHITECT OR ENGINEER IS NOT RESPONSIBLE FOR ENFORCING SAFETY MEASURES. CONTRACTOR/INSTALLER SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS AND REGULATIONS. THE PROJECT DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE FINISHED PRODUCT ONLY. REFER TO THE INSTALLATION INSTRUCTIONS DURING THE ERECTION OF THE STRUCTURE.

DESIGN CRITERIA

1. DEAD LOADS TOTAL: MODEL VSBX-314LED 250 LB
   MODEL VSBX-742LED 1200 LB
   MODEL VSBX-393LED 1115 LB

3. LATERAL LOADS:
   SEISMIC: ZONE 3, I=1.0, SOIL TYPE Sd, Cc=0.36, Ap=2.5, Rp=3.0
   WIND: 70 MPH
   EXPOSURE: C

FOUNDATION

1. GEOTECHNICAL INVESTIGATION: THE TWINING LABORATORIES, INC. PROJECT NUMBER A43010.08-01.

2. FOUNDATION MATERIAL: MEDIUM STIFF TO STIFF SANDY SILTS.

3. FOUNDING OF FOOTING AND SLAB: ON FIRM UNDISTURBED NATURAL SOILS OR APPROVED COMPACTED SOILS

4. SOIL PRESSURES:
   SOIL BEARING DEAD LOAD: 2,000 PSF
   ULTIMATE PASSIVE RESISTANCE: 308 PCF
   DESIGN FACTOR OF SAFETY: 1.5

5. GEOTECHNICAL ENGINEER: AS REQUIRED BY DSA SHALL OBSERVE FOOTING BEFORE PLACEMENT OF CONCRETE. FOOTING OBSERVATION AND COMPACTION REPORTS SHALL BE SENT TO THE PROJECT ARCHITECT OR ENGINEER AND DSA.

REINFORCED CONCRETE (CBC CHAPTER 19A, DIV. II)

1. MATERIALS:
   CEMENT: ASTM C-150 TYPE II
   AGGREGATE: ASTM C-33 STANDARD WEIGHT
   REINFORCING: ASTM A-615-92B FY=60 KS:

2. CONCRETE STRENGTHS: THE CONCRETE STRENGTHS SHOWN IN THE FOLLOWING TABLE ARE THE MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS; THE AGGREGATE (AGG) SHOWN IS THE MAXIMUM SIZE. CONCRETE SHALL BE STANDARD WEIGHT CONCRETE (145 PCF) IN ACCORDANCE WITH CBC PART 2, 1905A.

ITEM OF CONSTRUCTION	STRENGTH (PSI)	AGGREGATE	SLUMP (INCHES)
FOUNDATIONS	2,500	1	2 TO 4

3. CHAMFER: 3/4 INCH ON EXPOSED CORNERS.

4. ADMIXTURES: REVIEWED BY THE PROJECT ARCHITECT OR ENGINEER. FLY ASH IN ACCORDANCE WITH CBC PART 2, 1903A.8.8. NO CALCIUM CHLORIDE.

STRUCTURAL STEEL (CBC CHAPTER 22A)

1. CODES: AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION FOR STRUCTURAL STEEL FOR BUILDINGS; MANUAL OF STEEL CONSTRUCTION ASD (NINTH EDITION); STRUCTURAL WELDING CODE AWS D1.1 AND AWS D1.4.

2. MATERIALS:
   STEEL MEMBERS AND PLATES: ASTM A-36, FY=36,000 PSI.
   MACHINE BOLTS: ASTM A-307, HEX HEAD, GRADE A.

3. GALVANIZED: HOT DIP ZINC COATED ASTM A361-85 ALL UNPAINTED EXPOSED EXTERIOR STEEL, BOLTS, NUTS, & WASHER.

4. WELDING: ALL FABRICATION WELDS SHALL BE IN STRICT ACCORDANCE WITH THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS) SPECIFICATIONS. ALL STRUCTURAL WELDS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF "PRE-QUALIFIED" WELDED JOINTS. ALL WELDING SHALL CONFORM TO ASTM A-233 SERIES E-70XX ELECTRODES-LOW HYDROGEN.

5. TESTING & INSPECTION: TESTING AND INSPECTION SHALL BE IN ACCORDANCE WITH CBC PART 2, AND 2231A.5.

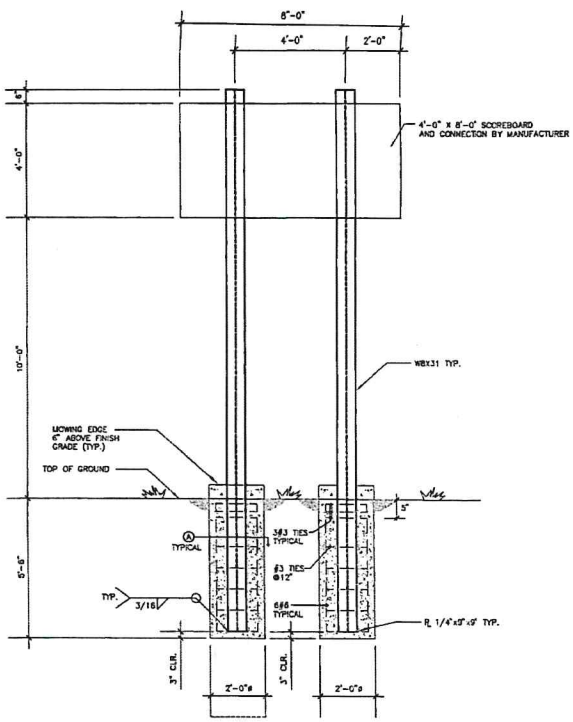
SPECIAL STRUCTURAL OBSERVATIONS BY PROJECT STRUCTURAL ENGINEER (CBC 1702A & 4-336)

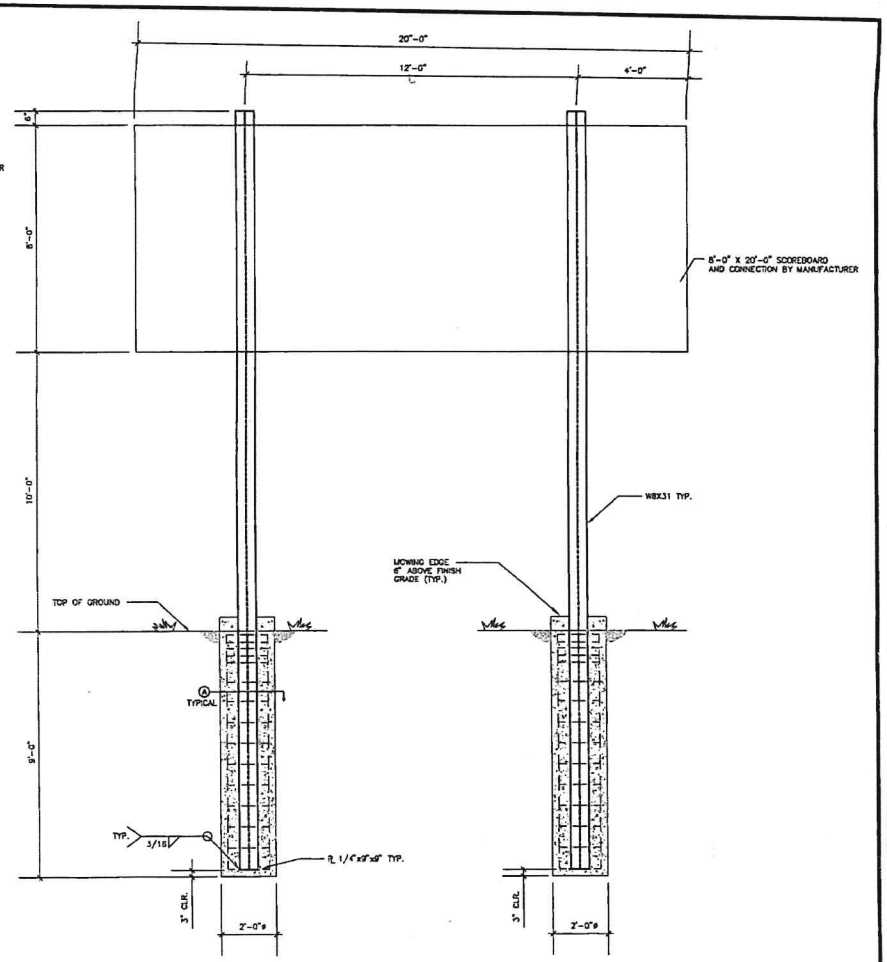
1. NOTIFICATION: 48 HOURS BEFORE OBSERVATION. DELINQUENT NOTIFICATION MAY REQUIRE DEMOLITION OF COVERING MATERIALS TO FACILITATE OBSERVATION.

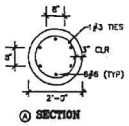
2. OBSERVATION BY PROJECT STRUCTURAL ENGINEER:

   A. SCOREBOARD POST BEFORE CONCRETE PLACEMENT.

3. WRITTEN STATEMENT, (CBC 1702A.4 & 4-336). THE PROJECT STRUCTURAL ENGINEER SHALL SUBMIT TO THE DSA A WRITTEN STATEMENT THAT THE SITE VISIT HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE OBSERVERS KNOWLEDGE, HAVE NOT BEEN RESOLVED.



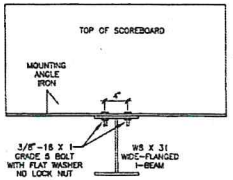




Ⓐ SECTION

MODEL VSBX-314LED SCOREBOARD

SCALE: 1/2" = 1'-0"



I-BEAM MOUNTED INSTALLATION

SCALE: N.T.S.

MODEL VSBX-393LED OR VSBX742 SCOREBOARD

SCALE: 1/2" = 1'-0"

CONSTRUCTION STAMP
DIV OF THE STATE ARCHITECT
02 108418
AC FLS CS ST
DATE 3/3/03

REGISTERED PROFESSIONAL ENGINEER ROBERT W. WONG NO. 3620 EXP. 03-31-08 STRUCTURAL CALIFORNIA

RWE ROBERT WONG ENGINEERING
Consulting Structural Engineers
2640 West Andrews Avenue, Fresno, Ca. 93705
Tel (559) 441-8760 Fax (559) 441-8760

REGISTERED PROFESSIONAL ENGINEER STEVEN R. MILLER No. 55,893 CIVIL STATE OF CALIFORNIA

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER ALAN K. MOSS No. 42,618 CIVIL STATE OF CALIFORNIA

CONSULTANT: Blair, Church & Flynn Consulting Engineers, 492 Clovis Avenue, Suite 200, Clovis, California 93612, Tel. (559) 326-1400, Fax. (559) 326-1300

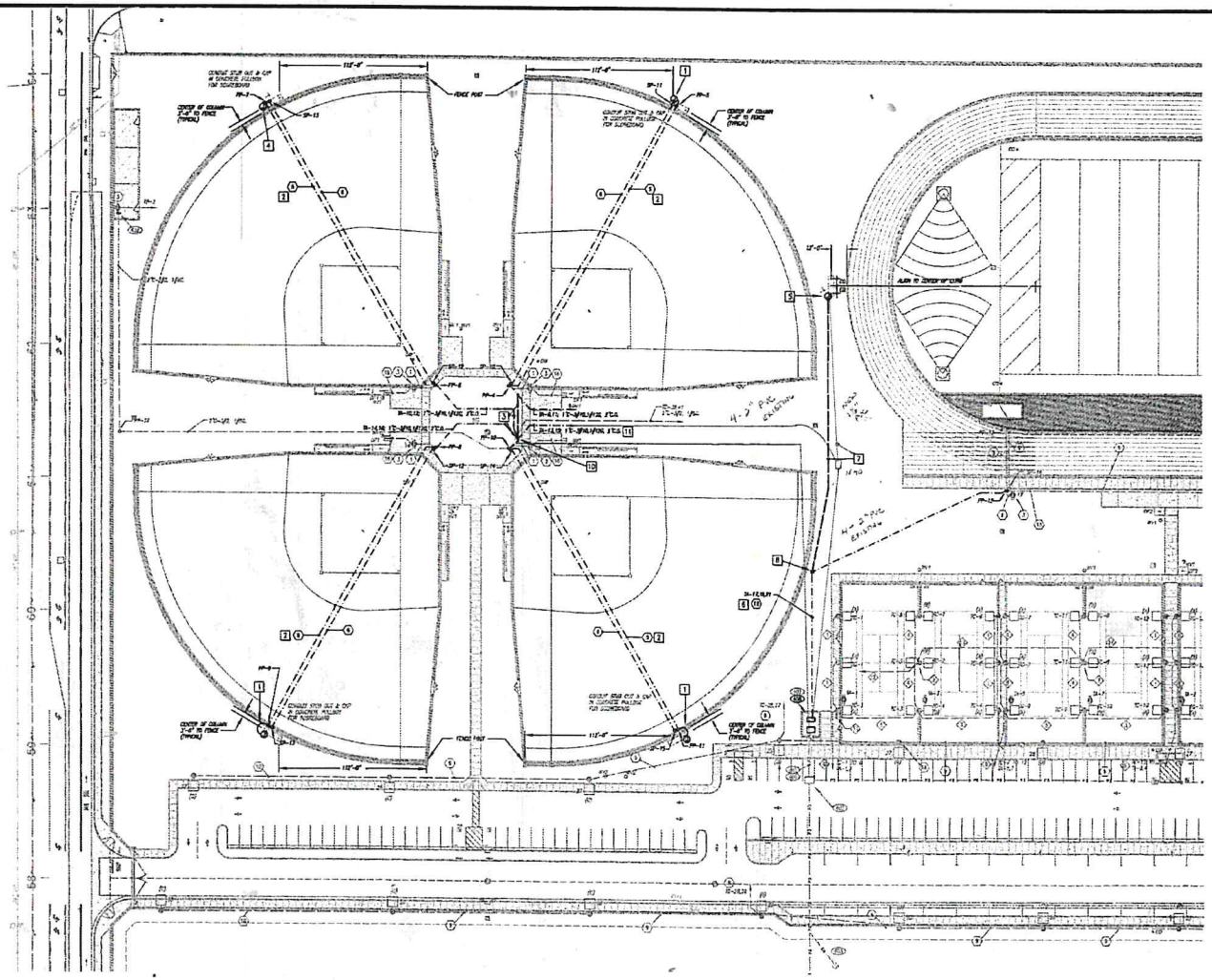
REF. & REV.

MADERA UNIFIED SCHOOL DISTRICT

SCOREBOARD IMPROVEMENTS AT MADERA HIGH SCHOOL SOUTH CAMPUS
STRUCTURAL DETAILS

DR. BY: AK
CK. BY: RW
DATE: 06-17-02
SCALE AS NOTED
SHEET NO. 2 OF 5 SHEETS

ROAD 26



KEY NOTES: SCOREBOARD IMPROVEMENT

ALL CONCRETE PULL BOXES ARE EXISTING UNLESS OTHERWISE NOTED.
VERIFY EXACT LOCATION.

EXISTING KEY NOTES RELATED TO THIS PROJECT

- (5A) (E)PANEL "2A", 120/208V 3ø 4W 200A/3P M.C.B. WITH 100A/3P SPARE CIRCUIT BREAKER. CONNECT TO 100A/3P CIRCUIT BREAKERS FOR THE NEW PANEL "3FA". (E)CONNECTED LOAD 3.8A; ADD NEW LOAD 18A.
- (11A) (E)PANEL "3FL", 120/208V 3ø 4W 200A/3P M.C.B. WITH (14) 20A/1P SPACES. PROVIDE NEW 20A/2P CIRCUIT BREAKER TO CONNECT FOR THE NEW SCOREBOARD. (E)CONNECTED LOAD 6.0A; ADD NEW LOAD 14A.
- (5) (E)2"C.O. (PWR)
- (8) (E)2"C.O. (SIGNAL); NO NEW WORK
- (12) (E)1"C.-4#8, 1#10G.; 1-1/2"C.O.

1. INSTALL SCOREBOARD VSSX-314LED 4'X8'. REFER TO SHEET NO. 2 FOR STRUCTURAL DETAIL AND REQUIREMENTS. REFER TO SHEET NO. 5-FOR ELECTRICAL CONNECTION DETAIL. SCOREBOARD SHALL BE LOCATED MINIMUM 3'-0" FROM FENCE & PER SCHOOL DISTRICT STANDARD.
2. PULL NEW 3/4, 1#8G.(CU.THWN) THRU (E)2"C. TO CONNECT BASEBALL SCOREBOARD
3. PROVIDE NEW 2"C. FROM NEW PANEL "3FA", INTERCEPT (E)2"C. PULL NEW 3/4, 1#8G.(CU.THWN) THRU (E)PULL BOX TO CONNECT SCOREBOARD
4. INSTALL SCOREBOARD VSSX-318LED 8'X20'. REFER TO SHEET NO. 2 FOR STRUCTURAL DETAIL AND REQUIREMENTS. REFER TO SHEET NO. 5 FOR ELECTRICAL CONNECTION DETAIL. SCOREBOARD SHALL BE LOCATED MINIMUM 3'-0" FROM FENCE & PER SCHOOL DISTRICT STANDARD.
5. INSTALL SCOREBOARD VSSX-716LED 8'X20'. REFER TO SHEET NO. 2 FOR STRUCTURAL DETAIL AND REQUIREMENTS. REFER TO SHEET NO. 5 FOR ELECTRICAL CONNECTION DETAIL. SCOREBOARD SHALL BE LOCATED MINIMUM 3'-0" FROM FENCE & PER SCHOOL DISTRICT STANDARD.
6. INTERCEPT (E)1-1/2"C. FROM (E)PANEL "2A", PULL NEW 3/4, 1#10G.(CU.THWN) TO CONNECT FOOTBALL SCOREBOARD
7. PROVIDE NEW 1-1/2"C. FROM NEW PULL BOX, PULL NEW 3/4, 1#8G. (CU.THWN) TO CONNECT FOOTBALL SCOREBOARD
8. PROVIDE NEW CHRISTY NH0 PULL BOX WITH NHO-61J COVER
9. PULL NEW 3/4, 1#8G.(CU.THWN) THRU (E)1"C. FROM (E)PANEL "3FL" THRU (E)PULL BOX TO CONNECT BASEBALL SCOREBOARD
10. PROVIDE NEW TESCO 37-000 PEDESTAL PANEL "3FA" ON NEW CONCRETE PAD. REFER TO SHEET NO. 5 FOR ELECTRICAL CONNECTION DETAIL & MOUNTING DETAIL
11. INTERCEPT (E)1"C FROM PANEL "2A" TO (E)PULL BOX #PP10. PULL NEW 4/0, 1#8G.(CU.THWN) THRU (E)2"C FROM (E)PANEL "2A" TO CONNECT NEW PANEL "3FA"

PARTIAL ELECTRICAL PLAN

0 20' 40' 80'
SCALE: 1" = 40'

CONTRACTOR'S STAMP
BID TO THE DISTRICT
CO 108116
BY
DATE 2/3/09

SCALE: 1"=40'

2H Engineering Corporation
Professional Engineers
2306 E. ASHLAN
FRESNO, CA 93726
(559) 222-6963
Fax (559) 222-5955
email ahn@2hengineering.com

REGISTERED PROFESSIONAL ENGINEER ALAYNE R. HOLLEY No. 15726 ELECTRICAL STATE OF CALIFORNIA
EXP. 06-30-09

REGISTERED PROFESSIONAL ENGINEER STEVEN R. BITTLE No. 55,883 CIVIL STATE OF CALIFORNIA
Exp. 12/31/09

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER ALAYNE R. HOLLEY No. 42,618 CIVIL STATE OF CALIFORNIA

CONSULTANT
Blair, Church & Flynn Consulting Engineers
4551 Clovis Avenue, Suite 205
Clovis, California 93612
Tel. (559) 326-1400
Fax. (559) 326-1570

REF. & REV.

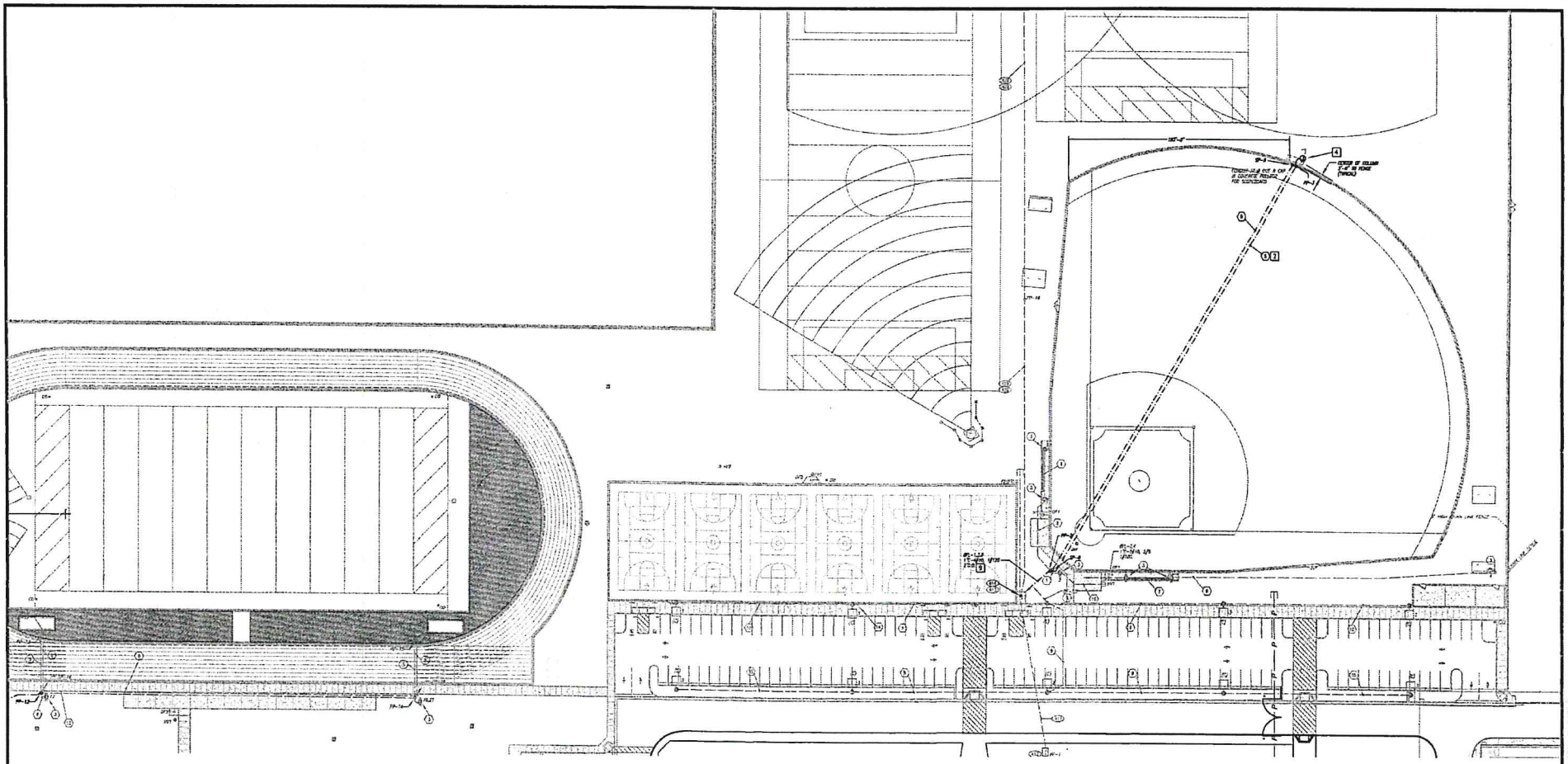
MADERA UNIFIED SCHOOL DISTRICT

SCOREBOARD IMPROVEMENTS AT
MADERA HIGH SCHOOL SOUTH CAMPUS
PARTIAL ELECTRICAL SITE PLAN

DR. BY: AH
CK. BY: RE
DATE: 08-15-08
SCALE AS NOTED

SHEET NO. 3
OF 5 SHEETS

060563.dwg 11-3-08 11:12:00PST



PARTIAL ELECTRICAL PLAN

0 20' 40' 80'

SCALE: 1" = 40'

REFER TO SHEET NO. 3 FOR ALL KEY NOTES

SCALE: N 1"=40'

2T Engineering Corporation
Professional Engineers
2335 E. ASHLAN
FRESNO, CA 93726
(559) 222-6053
Fax (559) 222-6055
email: ahsg@2tengineering.com

REGISTERED PROFESSIONAL ENGINEER
STEVEN R. MILLER
No. 55,883
Exp. 12/31/08
ELECTRICAL
STATE OF CALIFORNIA

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER
ALAN K. BOGE
Exp. 3/31/08
No. 42,818
CIVIL
STATE OF CALIFORNIA

CONSULTANT
Blair, Church & Flynn
Consulting Engineers
651 Clovis Avenue,
Suite 201
Clovis, California 93612
Tel. (559) 326-1400
Fax. (559) 326-1500

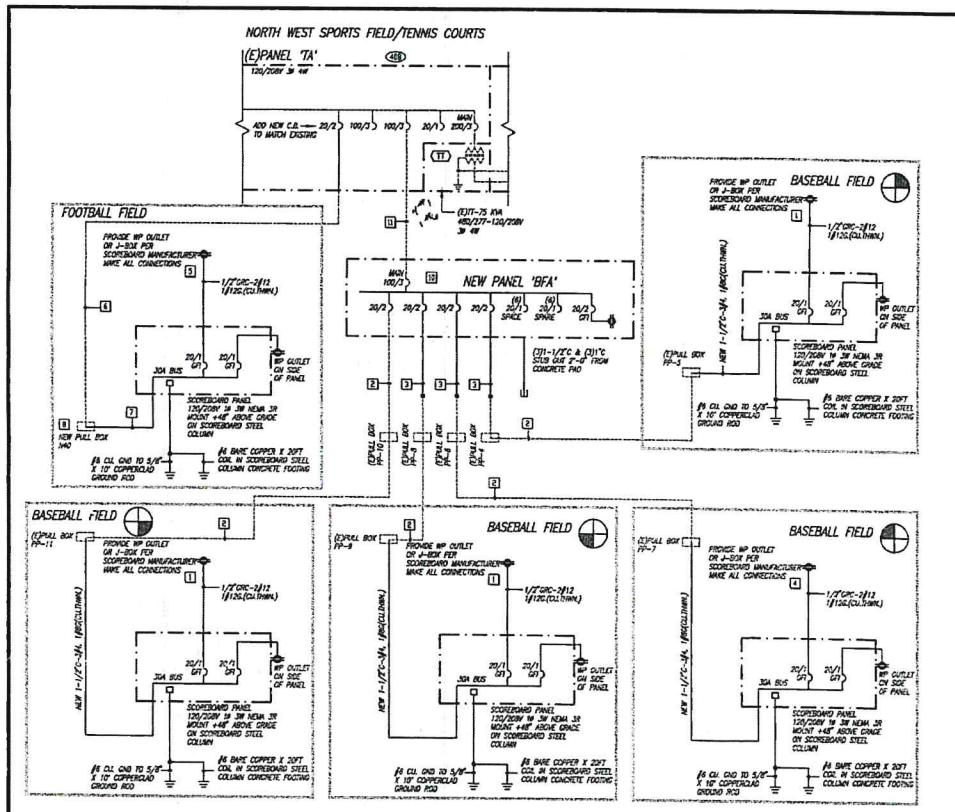
REF. & REV.

MADERA UNIFIED SCHOOL DISTRICT

SCOREBOARD IMPROVEMENTS AT
MADERA HIGH SCHOOL SOUTH CAMPUS
PARTIAL ELECTRICAL SITE PLAN

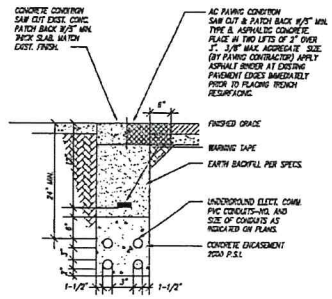
DR. BY: JH
CK. BY: SM
DATE: 08-13-08
SCALE: AS NOTED

SHEET NO. 4
OF 5 SHEETS

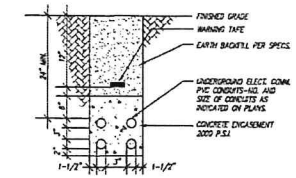


SINGLE LINE DIAGRAM

NOT TO SCALE



TRENCH SECTION–PAVED AREAS



TRENCH SECTION–UNPAVED AREAS

GENERAL ARRANGEMENT SHOWN FOR ELECTRICAL TRENCH. REFER TO CIVIL ENGINEERING PLANS AND SPECIFICATIONS WHICH GOVERN EARTH WORK, CONCRETE & ASPHALT PAVING. COORDINATE SCOPE OF WORK WITH OTHER TRADES.

TYPICAL TRENCH DETAIL

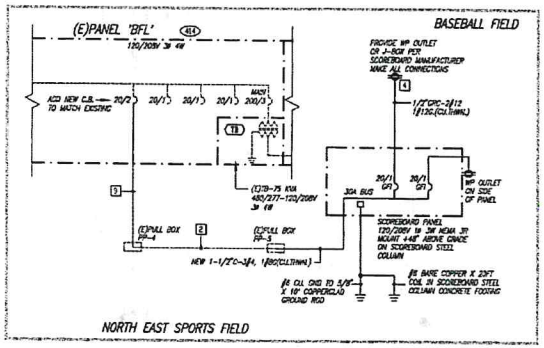
NOT TO SCALE

GENERAL ELECTRICAL NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO LATEST CODES AND ORDINANCES. IT IS THE INTENTION OF THESE PLANS AND SPECIFICATIONS TO COVER ALL THINGS REQUIRED TO PROVIDE COMPLETE AND OPERATIVE SYSTEMS. THE CONTRACTOR IS TO FURNISH LABOR, MATERIAL, TRANSPORTATION, EQUIPMENT, MISCELLANEOUS SERVICES, ETC. REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION IS TO BE INCLUDED, WHETHER SPECIFICALLY SHOWN OR MENTIONED. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
2. ALL EQUIPMENT TO HAVE TESTING LABORATORY LABEL ATTACHED (U.L., C.S.A., ETC.) AS PER C.E.C. 110-2. PROOF OF TESTING LABEL REQUIRED WITH ALL SUBMITTALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE REQUIREMENTS.
3. WORKING CLEARANCE TO BE MAINTAINED AS PER C.E.C. 110-16 FOR ALL PANEL, SERVICE EQUIPMENT, DISCONNECT SWITCH, ETC. MINIMUM 36" IN FRONT SIDE. WORKING CLEARANCE SHALL BE MINIMUM 30" WIDE WITH 19" CLEARANCE FROM EDGE OF ENCLOSURE TO OBSTRUCTION. THE WORK SPACE SHALL PERMIT AT LEAST 90 DEGREE OPENING OF EQUIPMENT DOORS OR HINGED PANELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORKING CLEARANCE REQUIREMENT FOR EQUIPMENT INSTALLED.
4. EQUIPMENT TO BE SUITABLE FOR AVAILABLE SHORT CIRCUIT CURRENT AS PER C.E.C. ARTICLE 370-85.
5. UNDERGROUND ELECTRICAL RACEWAY SYSTEM SHALL BE GALVANIZED RIGID STEEL WITH PVC COATING BURIED MINIMUM 24" BELOW GRADE WITH WARNING TAPE 12" BELOW GRADE AND VERIFY WITH CIVIL ENGINEER BACKFILL COMPACTION AND TEST REQUIRED AS PER GENERAL CONDITION SPECIFICATIONS OF EARTH WORK SECTION OR MINIMUM OF 90% COMPACTION REQUIRED. PVC SCH. 40 CONDUIT MAY BE USED UNDER TENNIS COURT CONCRETE SLAB. PVC CONDUIT SHALL HAVE GALVANIZED RIGID STEEL ELBOWS AND RISERS FOR CONDUIT 1-1/4" & LARGER. GALVANIZED RIGID STEEL EXPOSED TO EARTH OR CONCRETE TO BE PVC COATED.
6. ALL WIRING SHALL BE IN GALVANIZED RIGID STEEL CONDUIT. EMT WHERE ALLOWED ABOVE CEILING OR ON ROOF. PVC SCH. 40 FOR UNDERGROUND ONLY WITH CONCRETE ENCASEMENT. PVC SCH. 80 CONDUIT SIZE 3/4" OR SMALLER MAY BE USED FOR ELBOW UP ONLY TO OES-PVC COATED RISER.
7. CONDUCTORS SHALL BE COPPER, TYPE THW/THHN FOR SIZE NO. 8 AWG. AND SMALLER, TYPE THHN FOR SIZE LARGER THAN NO. 8 AWG.
8. VERIFY EXACT EQUIPMENT & POLE LOCATIONS PRIOR TO ROUGH-IN. THE CONTRACTOR SHALL ARRANGE A MEETING WITH OWNER TO VERIFY EXACT REQUIREMENT OF INSTALLATION.
9. ELECTRICAL ROUTING IS DIAGRAMATIC ONLY. ACTUAL ROUTING & PHYSICAL CONDITION MAY VARY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL ROUTING AND PROVIDE ALL RECONNECTIONS & ITEMS NECESSARY FOR COMPLETE & OPERATING SYSTEMS. REPAIR OR REPLACE ALL EXISTING ITEMS DAMAGED DURING CONSTRUCTION.
   VERIFY EXISTING UNDERGROUND UTILITY LOCATIONS. NOTIFY UNDERGROUND SERVICE ALERT (800)642-2444 PRIOR TO EXCAVATION. MAINTAIN CLEARANCE PER PUBLIC UTILITY RULES AND NATIONAL ELECTRICAL CODE
10. ANY REQUIRED SHUT DOWN TIME SHALL BE COORDINATED WITH DISTRICT AT LEAST 3 WEEKS IN ADVANCE. THE CONTRACTOR SHALL INCLUDE ALL NECESSARY REQUIRED OVERTIME IN BID.
11. ALL NEW POWER WIRING SHALL BE MEGGER TESTED AFTER INSTALLATION AND PRIOR TO ENERGIZATION.
12. PROVIDE ALL CUTTING & PATCHING OF EXISTING ASPHALT & CONCRETE AS REQUIRED. REFER TO CIVIL ENGINEERING PLANS & SPECIFICATIONS.
13. THE PLANS AND SPECIFICATIONS ARE INTENDED TO BE USED AS CONSTRUCTION GUIDELINE AND NOT THE TOTAL INSTRUMENT OF CONTRACT DOCUMENTS. IT IS NOT THE INTENTION OF ANY CONSTRUCTION PLANS TO DIVIDE WORK AMONG DIFFERENT TRADES. VERIFY SCOPE OF WORK WITH DISTRICT AND GENERAL CONTRACTOR.

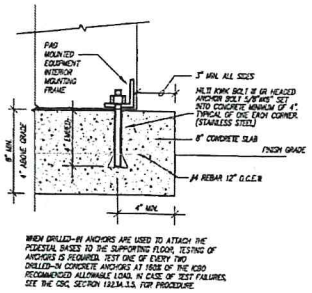
ELECTRICAL SYMBOLS:

- JUNCTION BOX
- DISTRIBUTION PANEL
- CONDUIT BELOW GRADE
- EXISTING ELECTRICAL EQUIPMENT
- EXISTING CONDUIT BELOW GRADE
- W.P. GFI DUPLEX RECEPTACLE WITH SELF-CONTAINED GFI UNIT
- CONDUIT STUB OUT AND CAP



SINGLE LINE DIAGRAM

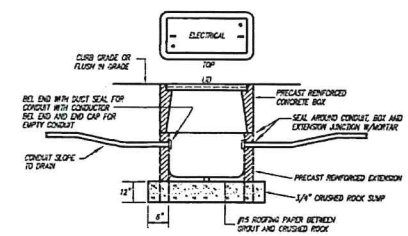
NOT TO SCALE



WHEN DRILLED-IN ANCHORS ARE USED TO ATTACH THE PEDESTAL BASES TO THE SUPPORTING FLOOR, TESTING OF ANCHORS IS REQUIRED. TEST ONE OF EVERY TWO DRILLED-IN CONCRETE ANCHORS AT 150% OF THE ICBO RECOMMENDED ALLOWABLE LOAD. IN CASE OF TEST FAILURES, SEE THE OSC SECTION 12.2.M.1.3. FOR PROCEDURE.

PAD MOUNTED ELECTRICAL PANEL OR CABINET MOUNTING DETAIL

NOT TO SCALE



TYPICAL PULL BOX DETAIL

NOT TO SCALE

REFER TO SHEET NO. 3 FOR ALL KEY NOTES

CERTIFICATION STAMP
DSA SS/CL FILE ARCHITECT
C2 108416
AC — R — DS — ST
DATE 3/18/11

2H Engineering Corporation
Professional Engineers
2356 E. ASHLAN
FRESNO, CA 93726
(559) 222-6983
Fax (559) 222-6985
email: ahrs@2hengineering.com

REGISTERED PROFESSIONAL ENGINEER WESLEY R. WILLIAMS NO. 15725 EXP. 09-30-08 ELECTRICAL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER STEVEN R. MILLER Exp. 12/31/08 No. 55,893 CIVIL STATE OF CALIFORNIA

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER ALAN R. MOSHER EXP. 6/31/08 No. 42,618 CIVIL STATE OF CALIFORNIA

CONSULTANT
Blair, Church & Flynn Consulting Engineers
400 Clovis Avenue, Suite 200
Clovis, California 93612
Tel. (559) 255-1400
Fax. (559) 229-1500

REF. & REV.

MADERA UNIFIED SCHOOL DISTRICT

SCOREBOARD IMPROVEMENTS AT MADERA HIGH SCHOOL SOUTH CAMPUS

ELECTRICAL NOTES & DETAILS

DR. BY: AH
CK. BY: AH
DATE: 03-12-08
SCALE: AS NOTED

SHEET NO. 5 OF 5 SHEETS