

Addendum No. 2


Bid No. 19/20-02MO, University High School High Voltage Replacement March 31, 2020





Addendum No. 2 forms a part of the contract and modifies the original bid documents. It is intended that all work affected by the following modifications shall conform to related provisions, project schedule, project manual/specifications, general conditions and drawings of the contract, of the original bid documents. **Modify the following items wherever appearing in any portion of the bid documents. Acknowledge receipt of Addendum No. 2 in the space provided on this form as well as on the Bid Form. Failure to do so may subject bidder to disqualification.**


Changes and/or Additions to Bid Documents

- 2.1 Generator – There are several items at the school that must remain running during the project. The school is currently not occupied, so the loads are significantly reduced. The contractor shall determine the number and size of the generators required to complete the work, based on their proposed work schedule. The following are required to remain functioning per the district’s guidelines:
 - 2.1.1 Pool and Pool Equipment – the existing pool equipment must run from 7 AM to 3 PM. It can be shut down for the evening. The contractor shall provide a generator with sufficient capacity to run the pool and pool equipment. The contractor shall start the generator in the morning in coordination with the District’s pool maintenance staff and turn the generator off in the afternoons in conjunction with the District’s pool maintenance staff. The contractor is not responsible for any of the pool equipment. The pool equipment requirements are as follows:
 - Total HP rating of the pool equipment is **30 HP**
 - The distributions total watts is **12,120**
 - Total motor amps is **112**
 - Total distribution amps is **146**
 - 2.1.2 Fire Alarm and Security Panels in each building – each building on campus has a fire alarm panel and some security. The contractor shall provide a two generators – one at the admin building and one at the 900 building to keep these two life-safety components functioning. The run time shall from 7 AM to 3 PM. It can be shut down for the evening and the battery backup will take over. The generator shall recharge the battery back up during the day.
- 2.2 PRE-BID RFI’S
 - 2.2.1 The attached are pre-bid RFI’s that were received for this project. The responses are included in this addendum in item 2.2.2.

High Voltage Replacement - University High School Questions

 Abe Parvizshahi <abe.parvizshahi@pacificutility.com>
To ● Debra Vaughan-Cleff
Cc ○ Jon Sudduth; ○ Melessa Wright; ○ Bill Pfeifer; ○ Dave Pattersen
Wed 3/25/2020 9:11 AM

 Reply  Reply All  Forward 

 You forwarded this message on 3/25/2020 9:21 AM.

Good Morning Debra,

Please see questions below regarding the High Voltage Replacement at University High School for more clarification:

- 1- Cable Spec on sheet E0.2 note 2 states 5KV 4/0 copper 133% insulation. Is this cable to be EPR or Poly? USA manufacture only?
- 2- Footages are not represented on plans, will there need to be as builds provided to district or will redlines submitted to architect for review and updating?
- 3- Please provide a clear, complete and defined feeder schedule. Such as P1 removed from Manhole 1 to 2, Install new P1 manhole 1 to 2 and so on or single line plan with feeders highlighted or colored in for removal and installation would be acceptable also. From Manhole 4 on, there seems to be slight confusion in routing. The difference in cable length and labor will drastically alter bid.
- 4- From Job walk understanding, circuit P3 is newer and no modifications are to be performed?
- 5- Will 3M or Equivalent Cold Shrink Termination kits be allowed? Discussion was overheard about tape splicing referenced in specification sent along with Bid package.
- 6- Will there be acceptance testing on cable required? Factory partial discharge test, VLF or hipot in field after pulled in and terminated?
- 7- Specifications in bid package outlines numerous items non-essential to this job. Such as switch gear and breaker maintenance, testing of switch gear and maintenance. Please define scope.
- 8- Please provide HP ratings of pool equipment.
- 9- Please provide electrical demand of life safety panels. In our experience a 2000watt Honda 120volt is normally all that is needed for a life safety panel. District employee was stating possibly a 7000watt. Please advise.

Thank you,

Abe Parvizshahi
Pacific Utility Installation, Inc.
1585 Harmony Circle Anaheim, CA 92807
714.970.6430
714.296.0285 cell
714.970.1163 Fax
www.pacificutility.com

2.2.2 Responses to RFI's.

1. Cable Spec on Sheet E0.2 Note 2 states 5KV 4/0 copper 133% insulation. Is this cable to be EPR or Poly? USA manufacture only?

Response: EPR insulation shall be provided as indicated in the Construction Documents. Refer to General Conditions of the Project Manual for foreign-made products.

2. Footages are not represented on plans, will there need to be as builds provided to district or will redlines submitted to architect for review and updating?

Response: Plans were developed from as-built plans and are very close to the correct scale. Addendum No. 1 allowed each bidder the opportunity to contact the district to schedule a time to measure distances. As-built plans were included in the original bid documents.

3. Please provide a clear, complete and defined feeder schedule. Such as P1 removed from Manhole 1 to 2, Install new P1 manhole 1 to 2 and so on or single line plan with feeders highlighted or colored in for removal and installation would be acceptable also. From Manhole 4 on, there seems to be slight confusion in routing. The difference in cable length and labor will drastically alter bid.

Response: See the attached sheets AD2-E0.2 and AD2-E1.0.

4. From Job walk understanding, circuit P3 is newer and no modifications are to be performed?

Response: See the attached sheets AD2-E0.2 and AD2-E1.0.

5. Will 3M or Equivalent Cold Shrink Termination kits be allowed? Discussion was overheard about tape splicing referenced in specification sent along with Bid package.

Response: Cold shrink wrap would be allowed.

6. Will there be acceptance testing on cable required? Factory partial discharge test, VLF or hipot in field after pulled in and terminated?

Response: Factory test is acceptable. Field testing is not required.

7. Specifications in bid package outlines numerous items non-essential to this job. Such as switch gear and breaker maintenance, testing of switch gear and maintenance. Please define scope.

Response: Delete maintenance and testing of existing switchgear.

8. Please provide HP ratings of pool equipment.

Response: See 2.1.1 above.

9. Please provide electrical demand of life safety panels. In our experience a 2000watt Honda 120volt is normally all that is needed for a life safety panel. District employee was stating possibly a 7,000-watt. Please advise.

Response: Loads of panels vary depending on size of the building. Provide 7,000-watt generator, max for these two locations, or as contactor's schedule allows. If panel load is less, contactor can provide a smaller generator. It is the decision of the contractor as long as the batteries are adequately charged, and the building is running correctly.

2.3 DRAWING REVISIONS:

2.3.1 Sheet T.1 – Scope of Work – Remove all transformer replacement from this project.

2.3.2 Sheet E0.2

2.3.2.1 Revise Single Line Diagram as shown on attached revised Drawing E0.2 and as follows:

2.3.2.1.1 Revised Plan Notes to clarify portion of existing HV feeders to remain.

2.3.2.1.2 Revised HV Feeder P3 to be replaced between Manhole #2 and Load Center #5, and from Manhole #2 and Load Center #4.

2.3.3 Sheet E1.0

2.3.3.1 Revise Site Electrical Plan as shown on attached revised Drawing E1.0 and as follows: Revised HV Feeder P3 connection to Manhole #6 in lieu of Manhole #1.

Attachments: Sheets E0.2 and E1.0

ALL OTHER PROVISIONS of the original bid documents shall remain unchanged.

SIGN AND RETURN THIS ADDENDUM NO. 2 WITH YOUR PROPOSAL.
Bid Due Date: April 6, 2020 at 2:00 pm.

Company Name

Print Name and Title

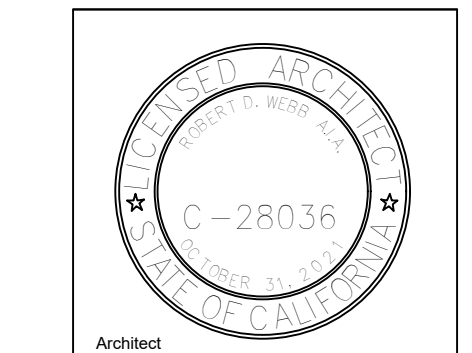
Signature

Date



Rev. #	Description	Date
1	ADD #2	3/31/20

studionwc
 ARCHITECTURE + ENGINEERING
 516 Encinitas Blvd. Ste. 201, Encinitas, California 92024
 Telephone: (760)753-6600 Fax: (760)452-7541



UNIVERSITY HIGH SCHOOL
 HIGH VOLTAGE REPLACEMENT
 IRVINE UNIFIED SCHOOL DISTRICT

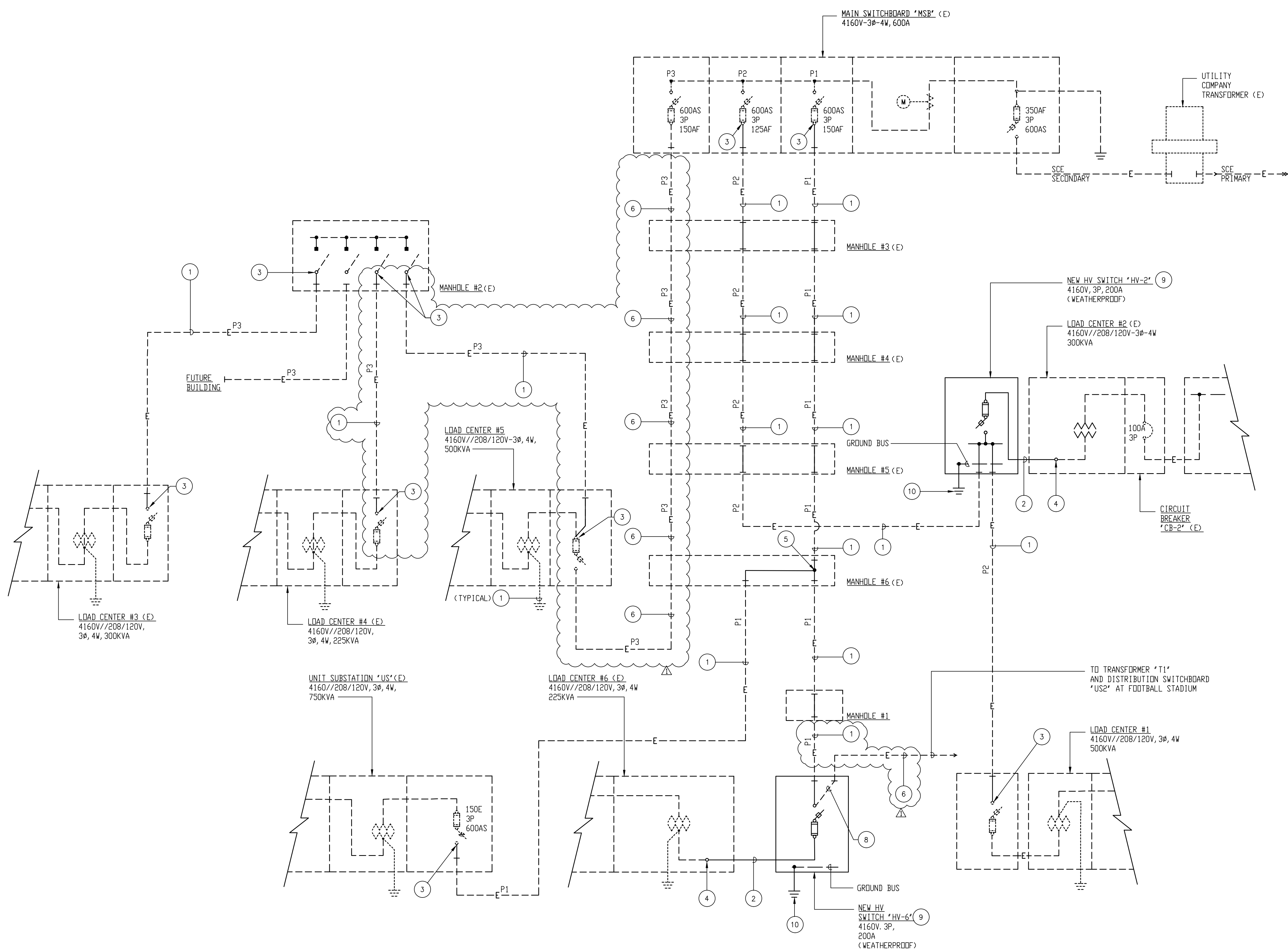
**SINGLE LINE
 DIAGRAM**

Drawn:
 FBA
 Checked:
 FBA
 Date:

Job:
AD-2
 E0.2

PLAN NOTES

- DISCONNECT AND REMOVE EXISTING 5KV COPPER CONDUCTORS FROM EXISTING UNDERGROUND CONDUIT. CLEAN-OUT AND MANDREL EXISTING CONDUITS FOR THE INSTALLATION OF THE NEW CONDUCTORS. PROVIDE NEW 3 # 4/0 5KV, COPPER, 133% EPR INSULATION, COPPER TAPE SHIELDED POWER CABLE AND 1 # 2 GROUND CONDUCTOR AND PULL THROUGH EXISTING CONDUITS AND MANHOLES AND TERMINATE AS INDICATED.
- PROVIDE 3 # 4/0 5KV, COPPER, 133% INSULATION, COPPER TAPE SHIELDED POWER CABLE AND 1 # 2 GROUND CONDUCTORS IN 4" CONDUIT.
- TERMINATE NEW CONDUCTORS ON EXISTING 5KV SWITCH LUGS.
- TERMINATE NEW CONDUCTORS ON EXISTING TRANSFORMER LUGS.
- PROVIDE NEW WATERPROOF SPLICE INSIDE EXISTING MANHOLE.
- EXISTING 5KV CONDUIT AND CONDUCTORS TO REMAIN.
- EXISTING GROUNDING SYSTEM TO REMAIN.
- DISCONNECT EXISTING 5KV CONDUCTORS FROM EXISTING 5KV OIL FUSE CUT-OUT SWITCH BEING REPLACED. EXTEND EXISTING CONDUCTORS AND RE-TERMINATE ON TO NEW 5KV SWITCH.
- DISCONNECT AND REMOVE EXISTING 5KV OIL FUSE CUT-OUT SWITCH. PROVIDE NEW 5KV SWITCH AND CONNECT AS INDICATED TO RESTORE POWER TO EXISTING 5KV TRANSFORMER EQUIPMENT.
- PROVIDE 1 # 2 GROUND AND BOND TO EXISTING TRANSFORMER GROUNDING SYSTEM.



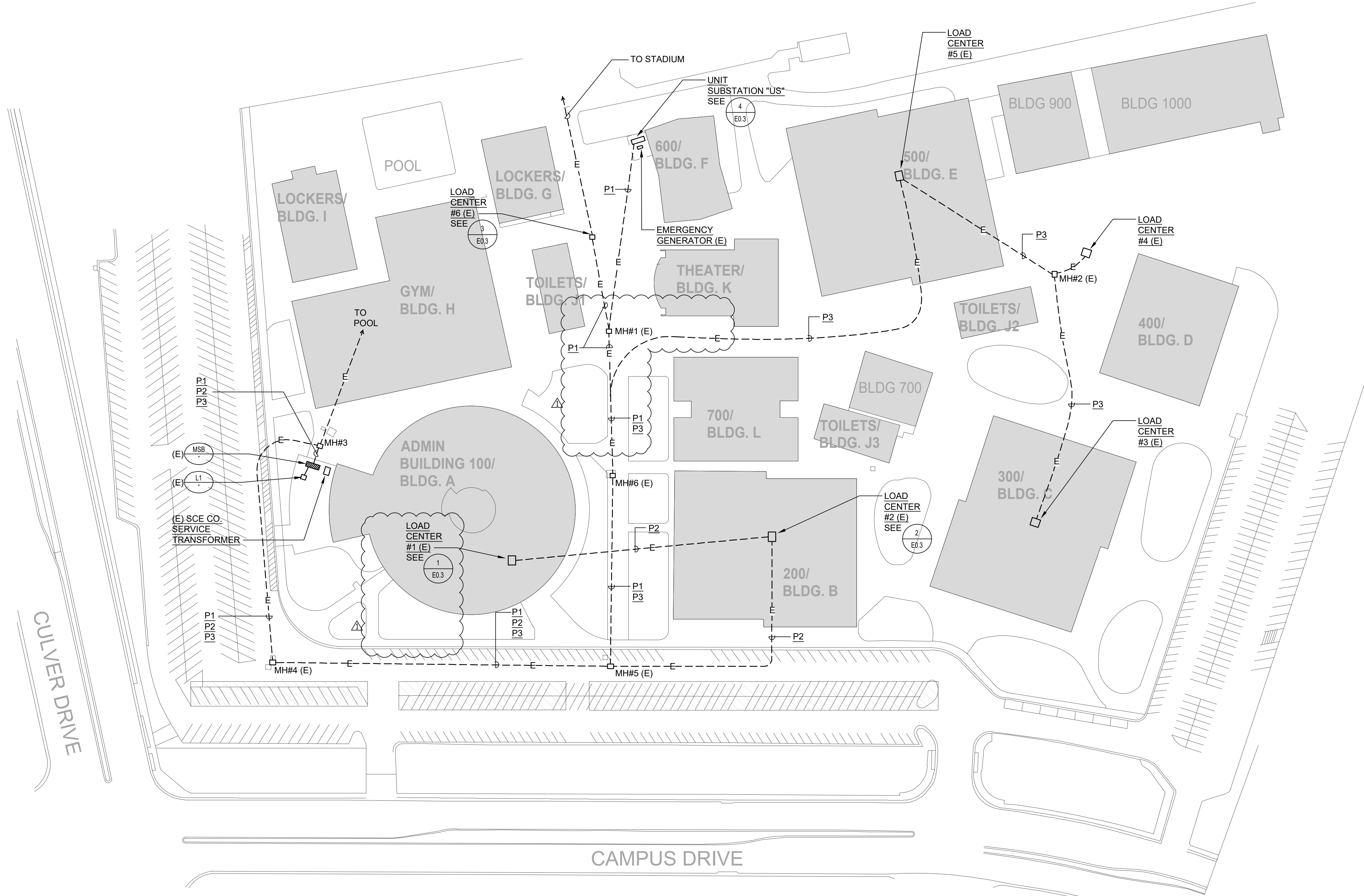
NOTE:
 UNLESS NOTED OTHERWISE,
 ALL WORK SHOWN DASHED
 IS EXISTING. ALL ELSE
 SHALL BE PROVIDED AS
 PART OF THIS CONTRACT.

SINGLE LINE DIAGRAM SCALE: NONE 1

FBA Engineering / Plot Date: 3/30/2020 1:10 PM / Plotted by: Tim Truong / Drawing Location: I:\1125074\E1.0_1125074.dwg

PLAN NOTES

- 1 ...
- 2 ...
- 3 ...



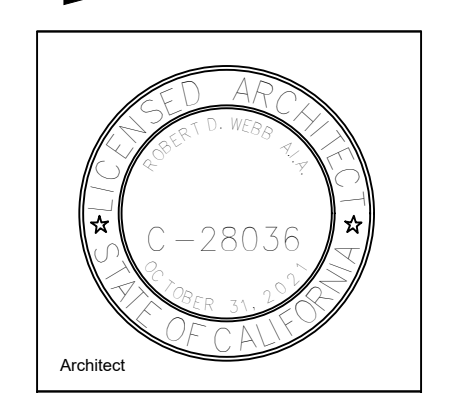
SITE ELECTRICAL PLAN SCALE: 1"=60'-0" 1

FBA Engineering
 Consulting Electrical Engineers
 150 Parklario Avenue, Suite A120
 Costa Mesa, CA 92626
 949.852.9995 • 949.852.1657 (fax)
 fbaengr.com
 FBA Job Number: 1125.074



Rev. #	Description	Date
1	ADD #2	3/31/20

studiorwc
 ARCHITECTURE + ENGINEERING
 516 Encinitas Blvd., Ste. 201, Encinitas, California 92024
 Telephone: (760)753-6600 Fax: (760)752-7541



UNIVERSITY HIGH SCHOOL
 HIGH VOLTAGE REPLACEMENT
 IRVINE UNIFIED SCHOOL DISTRICT

SITE ELECTRICAL PLAN

Drawn: FBA
 Checked: FBA
 Date:

Job: AD2-
 E1.0