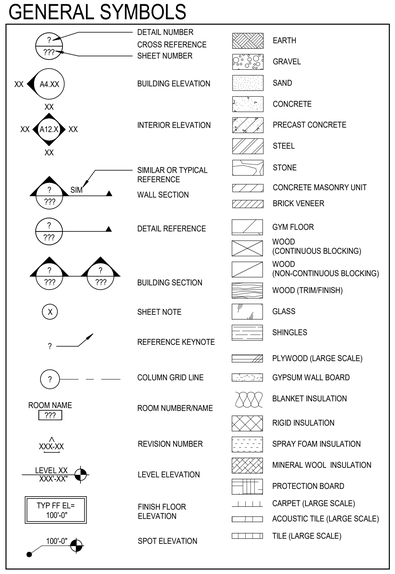
MVUSD ATHLETIC LIGHTING UPGRADE MURRIETA VALLEY HS

MURRIETA VALLEY UNIFIED SCHOOL DISTRICT

GENERAL SYMBOLS



AGENCY REQUIREMENTS

1. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

2. TITLE 24, CCR, PARTS 1–5 MUST BE KEPT ON SITE DURING CONSTRUCTION

3. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, C.C.R.

4. ALL SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE CONSIDERED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION. (IR A-6) (SECTION 4-338(c), PART 1) SUBSTITUTIONS SHALL BE FOR ANY MATERIAL, SYSTEM OR PRODUCT THAT WOULD OTHERWISE BE REGULATED BY DSA.

5. CONSTRUCTION CHANGE DOCUMENTS MUST BE SIGNED BY ALL THE FOLLOWING:
   a. A/E OF RECORD
   b. STRUCTURAL ENGINEER (WHEN APPLICABLE)
   c. DELEGATED PROFESSIONAL ENGINEER (WHEN APPLICABLE)
AND SHALL BE SUBMITTED TO AND APPROVED BY DSA.

6. A DSA ACCEPTED TESTING LABORATORY, EMPLOYED DIRECTLY BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

7. THE PROJECT INSPECTOR AND TESTING LAB SHALL BE EMPLOYED AND PAID BY THE OWNER AND APPROVED BY ALL OF THE FOLLOWING:
   a. A/E OF RECORD
   b. STRUCTURAL ENGINEER (WHEN APPLICABLE)
   c. DSA

8. FOR ALTERATIONS, REHABILITATION OR RECONSTRUCTION AS STATED IN (SECTION 4-317(C), PART 1, TITLE 24, CCR) OR SIMILAR MEANING: "THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK."

9. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

10. NO DEMOLITION SHALL BEGIN UNTIL PLANS INCLUDING THE DEMOLITION WORK HAVE BEEN APPROVED BY DSA.

11. A COMPLETED SITE FIRE SAFETY PLAN IN COMPLIANCE WITH CFC 3303.1.1, IS TO BE SUBMITTED TO DSA IN CONJUNCTION WITH THE FILING FORM DSA 102-IC: CONSTRUCTION START NOTICE / INSPECTION CASRD REQUEST, INCLUSIVE OF COMPLETING SECTION 3 OF THE FORM PER DSA BU 24-05.

INSPECTOR OF RECORD

A DSA CERTIFIED INSPECTOR OF RECORD (IOR) OF RECORD SHALL BE EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT (DSA). DUTIES AND REQUIRED IOR CLASSIFICATION PER SECTION 4-342, TITLE 24, PART 1 CCR AND IR A-7: CLASS 3 CERTIFIED BY DSA.

APPLICABLE CODES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH:

   2025 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR

   2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR

   2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR

   2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 CCR

   2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR

   2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

   2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR

   2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR

   2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR

   2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR

   TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2. ALL BARRIER FREE ITEMS SHALL COMPLY WITH TITLE 21 AND 24 OF THE CALIFORNIA CODE OF REGULATIONS, 2022.

3. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE REQUIREMENTS OF THESE CODES AND ALL APPLICABLE LOCAL ORDINANCES. WHERE CODES CONFLICT, THE MORE STRINGENT SHALL APPLY.

4. PROTECTION DURING WELDING: CONFORM TO TITLE 8, C.C.R. FURTHER PROTECT OCCUPANTS AND THE PUBLIC WITH PORTABLE SOLID VISION BARRICADES AROUND LOCATION WHERE WELDING IS BEING PERFORMED. PROVIDE SIGNS WARNING AGAINST LOOKING AT WELDING WITHOUT PROPER EYE PROTECTION OR EQUIVALENT. SEE C.F.C. FOR REQUIREMENTS FOR ON SITE WELDING.

5. DURING THE ENTIRE CONSTRUCTION PERIOD, IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CONDITIONS AT THE PROJECT SITE TO MEET THE REQUIREMENTS OF D.S.A. AND THE CALIFORNIA OCCUPATIONAL REGULATIONS. THIS PROVISION SHALL COVER THE CONTRACTOR'S EMPLOYEES AND ALL OTHER PERSONS WORKING UPON OR VISITING THE SITE. THE CONTRACTOR SHALL BECOME FULLY INFORMED OF ALL APPLICABLE STANDARDS AND REGULATIONS AND INFORM ALL PERSONS AND REPRESENTATIVES RESPONSIBLE FOR WORK UNDER THIS CONTRACT.

APPLICABLE STANDARDS

NFPA 13	AUTOMATIC FIRE SPRINKLER SYSTEMS	2022 EDITION
NFPA 14	STANDPIPE AND HOSE SYSTEMS	2024 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEMS	2021 EDITION
NFPA 20	STATIONARY PUMPS FOR FIRE PROTECTION	2022 EDITION
NFPA 24	PRIVATE FIRE MAINS & THEIR APPURTENANCES	2025 EDITION
NFPA 25	STANDARD FOR INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS	2023 CA EDITION
NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE	2022 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2019 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2018 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2023 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2022 EDITION
ICC 300	STANDARDS ON BLEACHERS, FOLDING AND TELESCOPING SEATING AND GRAND STANDS	2017 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2024
UL 464	AUDIBLE SIGNAL APPLIANCES	2023 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2023 EDITION

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80

TESTING

THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.

A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTP://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPIC/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE.

THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE
CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

DEFERRED APPROVAL ITEMS

FABRICATION AND INSTALLATION OF DEFERRED APPROVAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER WHO HAS BEEN DELEGATED THE RESPONSIBILITY OF COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION, AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. DEFERRED ITEMS SHALL BE COMPLETED PRIOR TO OCCUPANCY OF BUILDINGS AFFECTED BY THE DEFERRED WORK.

ALL WORK SHALL CONFORM TO 2022 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

DEFERRED APPROVAL ITEMS ARE AS FOLLOWS:

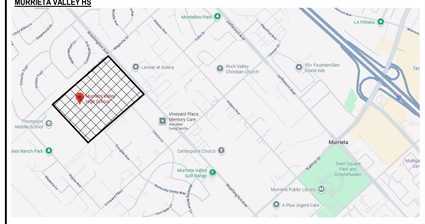
NONE.

THE PLANS AND SPECIFICATIONS SHALL BE STAMPED AND SIGNED BY THE ARCHITECT AND ENGINEER OF RECORD BEFORE SUBMITTAL TO DSA.

VICINITY MAP

NOT TO SCALE

MURRIETA VALLEY HS



NORTH

SCOPE OF WORK

UPGRADING ATHLETIC LIGHTING AT FOOTBALL FIELD AT MURRIETA VALLEY HIGH SCHOOL.

ALL FOOTINGS AND POLES STAY INTACT, THE SCOPE OF WORK IS LIMITED TO UPGRADE THE LIGHT FIXTURES

GENERAL NOTES

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A C.C.D. APPROVED BY THE OFFICE OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, C.C.R.

FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33

SHEET INDEX

SHEET INDEX - MV	
Sheet Number	Sheet Name
G1.2	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
A1.0.2	OVERAL SITE PLAN MURRIETA VALLEY HS
E1.0	ELECTRICAL LEGEND AND NOTES
E1.1	OVERALL SITE PLAN
E1.2	ENLARGED SITE PLAN
E1.3	FOOTBALL FIELD - PHOTOMETRICS
E7.1	SPORTS LIGHTING ONE LINE DIAGRAM
E10.1	MUSCO DRAWINGS
E10.2	MUSCO DRAWINGS
E10.3	MUSCO DRAWINGS
E10.4	MUSCO DRAWINGS
E10.5	MUSCO DRAWINGS
E10.6	MUSCO DRAWINGS

TOTAL SHEET COUNT: 13

Statement of General Conformance

For Design Professional in General Responsible Charge who utilize plans

INCLUDING BY NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

(Application No. 04-125019 **File No.** 33-H18 **)**

☒ All drawings or sheets listed on the cover or index sheet (Civil, Landscape, Structural, Mechanical, Plumbing, Electrical and Fire Protection)

☐ This drawing, page of specifications/calculations

☐ Drawing sheets included under the following PC approval(s)

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for:

1. design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and
2. coordination with my plans and specifications and is 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. *(Title 24, Part 1, Section 4-316 (b))*

I find that: ☒ All drawings or sheets listed on the cover or index sheet ☐ This drawing or page

☒ is/are in general conformance with the project design, and

☒ has/have been coordinated with the project plans and specifications

Signature	12/01/2025 **Date**
Architect or Engineer designated to be in general responsible charge	
Alfred F. Gessel **Print Name**	
C30244 **License Number**	6/30/2027 **Exp. Date**

PROJECT DIRECTORY

ARCHITECT
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SAN DIEGO, CA 92101
PHONE: (619) 795-2450
MANAGER: Mehdi Hezaveh
EMAIL: mhezaveh@dlrgroup.com
WEB: WWW.DLRGROUP.COM

STRUCTURAL ENGINEER
RTM ENGINEERING CONSULTANTS
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WEB: www.rtmec.com

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PHONE: 951 623 4031
MANAGER: Jose Contreras
EMAIL: jocontreras@murrieta.k12.ca.us
WEB: www.murrieta.k12.ca.us

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APP. 04-125019 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 01/14/2026

DSA APPROVAL STAMP

LICENSED ARCHITECT ALFRED F. GESSEL NO.C30244 REN 6-30-27 STATE OF CALIFORNIA

DESIGN PROFESSIONAL STAMP

DLRGROUP

© DLR Group

DLR GROUP PROJECT #: 75-25240-00

MVUSD ATHLETIC LIGHTING UPGRADE

Project Address
Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

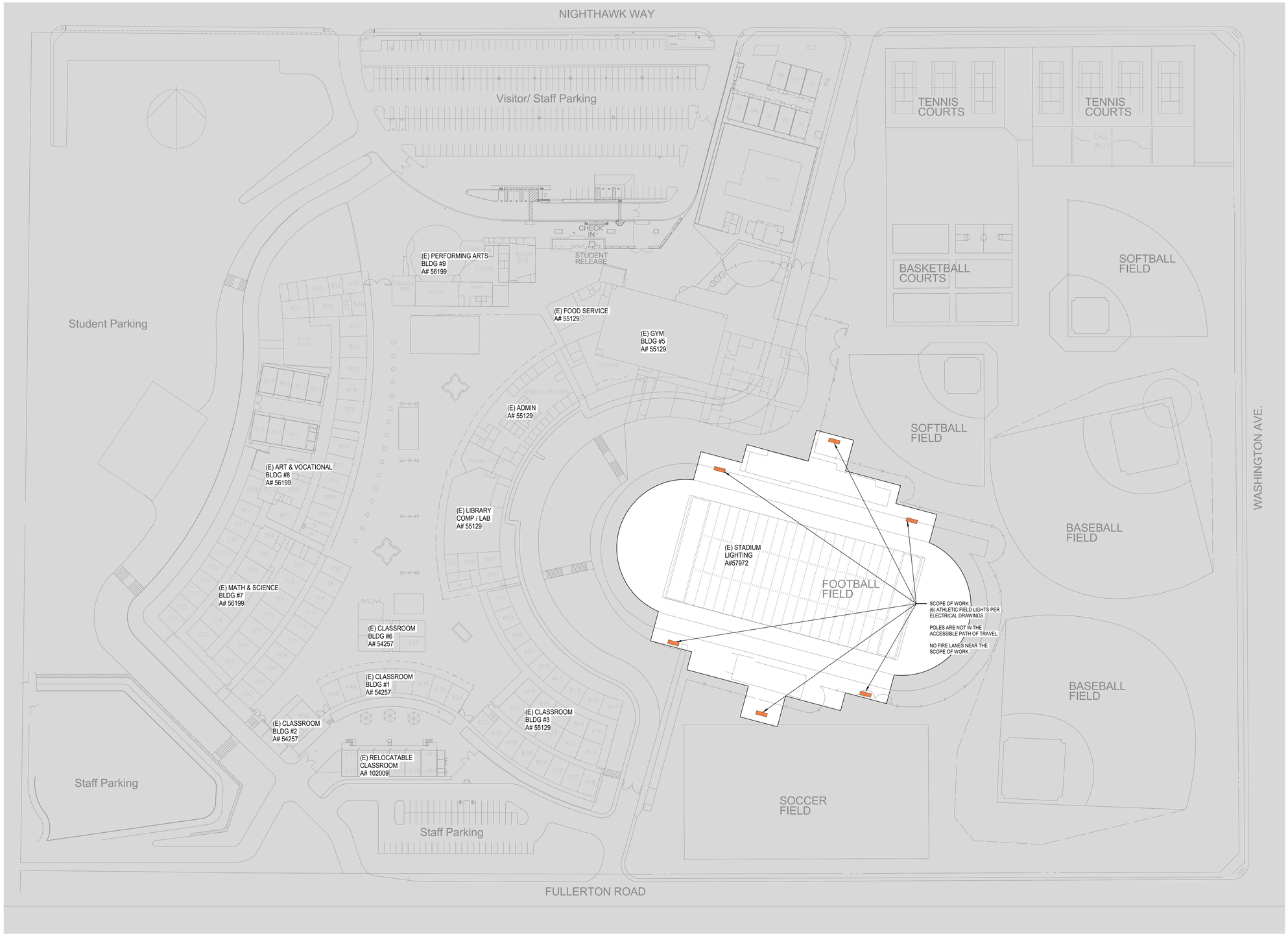
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12/01/2025
Revisions

GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

G1.2

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SITE PLAN - OVERALL - ATHLETIC FIELD LIGHTS - MURRIETA VALLEY HS

SCALE: 1" = 60'-0"

NORTH

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DATE: 01/14/2026

DSA APPROVAL STAMP

LICENSED ARCHITECT ALFRED F. DESENA NO.C30244 REN. 6-30-27 STATE OF CALIFORNIA

DESIGN PROFESSIONAL STAMP

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DLR GROUP PROJECT #: 75-25240-00

MVUSD ATHLETIC LIGHTING UPGRADE

Project Address
Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

100%CD

12/01/2025
Revisions

OVERAL SITE PLAN
MURRIETA VALLEY HS

A1.0.2

Autodesk Docs://75-25240-00 MVUSD Athletic Lighting Upgrade/75-25240-00_MVUSD Athletic Lighting Upgrade_AR_2024.rvt
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ABBREVIATIONS

A	AMPERE (AMPS)
AC	ALTERNATING CURRENT
AF	AMPS-FRAME (RATING)
AIC	AMP INTERRUPTING CURRENT
AM	AMMETER
AS	AMP SWITCH (FUSED SWITCH RATING)
AT	AMPS-TRIP (RATING)
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BLDG	BUILDING
C	CONDUIT
CB	CIRCUIT BREAKER
CO	CONDUIT ONLY
CT	CURRENT TRANSFORMER
CU	COPPER
CFOI	CONTRACTOR FURNISHED OWNER INSTALLED
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
DWG	DRAWING
EX	EXISTING
FLA	FULL LOAD AMPS
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GFI	GROUND FAULT INTERRUPTER
GRD/GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
KW	KILOWATT
LCL	LONG CONTINUOUS LOAD
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
MCC	MOTOR CONTROL CENTER
MCM (KCM)	THOUSAND CIRCULAR MILS
MECH	MECHANICAL
NC	NORMALLY CLOSED
NF	NON-FUSED
NO	NORMALLY OPEN/NUMBER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
P	POLE
PH	PHASE
POC	POINT OF CONNECTION
PRS	PVC COATED RIGID STEEL (CONDUIT)
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE DUCT
SWBD	SWITCHBOARD
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLTAMPERES
VM	VOLTMETER
VL	VERIFY LOCATION
W	WIRE/WATTS
WP	WEATHERPROOF (NEMA TYPE 3R)
WT	WATERTIGHT
XP	EXPLOSION PROOF (RATED FOR AREA HAZARD)

ELECTRICAL SYMBOL LEGEND

LIGHTING

- SPORTSLIGHTING FIXTURES AND POLES

DISTRIBUTION EQUIPMENT

- DRAW OUT TYPE EQUIPMENT
- VACUUM CIRCUIT BREAKER, RATING AS NOTED.
- AIR INTERRUPTER SWITCH AND FUSE
- AIR INTERRUPTER
- FUSE
- POWER TRANSFORMER, RATING AS NOTED
- POWER CIRCUIT BREAKER DRAWOUT
- AUTOMATIC TRANSFER SWITCH. SEE SCHEDULE
- (A) AMMETER
- (V) VOLTMETER
- CIRCUIT BREAKER
  - 200AF — 200AMP FRAME
  - 200AT — 200AMP TRIP
  - 3P — 3 POLE
  - 10,000AIC — 10,000 AMPS INTERRUPTING CURRENT
- FUSED SWITCH
  - 200AS — 200AMP SWITCH
  - 200AF — 200AMP FUSE
  - 3P — 3 POLE
- (M) UTILITY COMPANY METER

POWER CONTINUED

- DUPLEX RECEPTACLE, WALL MOUNTED, +18" AFF. (U.O.N.)
- FOURPLEX RECEPTACLE, WALL MOUNTED, +18" AFF. (U.O.N.)
- RECEPTACLE MOUNTED +6" ABOVE COUNTER BACKSPLASH SEE ARCHITECTURAL PLANS FOR REQUIRED MOUNTING HEIGHT PRIOR TO ROUGH-IN.
- GFI DUPLEX GROUND FAULT INTERRUPTING RECEPTACLE +18" AFF. (U.O.N.)
- WP DUPLEX RECEPTACLE IN WEATHERPROOF ENCLOSURE +18" AFF. (U.O.N.)
- WP/L DUPLEX RECEPTACLE IN WEATHERPROOF 'LOCKING' ENCLOSURE +18" AFF. (U.O.N.) (SEE TYPICAL DETAILS E3 SERIES SHEETS AND SPECIFICATIONS FOR REQUIRED TYPE.)
- (J) (JH) JUNCTION BOX, CEILING OR WALL MOUNTED
- CONDUIT AND WIRE, CONCEALED IN CEILING OR WALL
- CONDUIT AND WIRE, CONCEALED IN OR UNDER FINISHED FLOOR OR UNDER FINISHED GRADE.
- FLEXIBLE CONDUIT CONNECTION
- BRANCH CIRCUIT HOMERUN TO PANEL. SLASHES INDICATE NUMBER OF CONDUCTORS. EQUIPMENT GROUND WIRE NOT INDICATED U.O.N. #12 CONDUCTORS ARE MINIMUM, NO HASH MARKS = MIN (2) #12
- 3/4" CONDUIT STUBBED FROM DEVICE TO ABOVE ACCESSIBLE CEILING
- #8 BRANCH CIRCUIT HOMERUN, NUMBER INDICATES INCREASED CONDUCTOR SIZE, CONDUCTORS SHALL REMAIN AS INDICATED FOR SIZE THROUGHOUT THE ENTIRE CIRCUIT.
- PANELBOARD, SURFACE MOUNTED.
- PANELBOARD, RECESSED
- T STEP-DOWN TRANSFORMER
- DISTRIBUTION SWITCHBOARD

GENERAL PROJECT NOTES:

1. UNLESS WHERE OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK.
2. UNLESS WHERE OTHERWISE NOTED, ALL DIMENSIONS ARE TO BE CENTERLINE OF THE DEVICE.
3. "GENERAL NOTES" SHOWN ON AN INDIVIDUAL DRAWING APPLY TO ALL WORK SHOWN ON THAT SHEET. "KEY NOTES" ONLY APPLY TO SPECIFIC ITEMS WHERE ANNOTATED AT SPECIFIC LOCATIONS. SOME KEY NOTES MAY NOT APPLY TO ANY SPECIFIC ITEMS.
4. UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBER SHALL BE CUT, NEITHER DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

GENERAL DEMOLITION NOTES:

1. ALL ELECTRICAL EQUIPMENT, EXPOSED RACEWAY AND CONDUIT, OUTLET BOXES AND RINGS, AND DEVICES ARE TO BE REMOVED, EXCEPT WHERE SHOWN TO REMAIN. EXISTING WIRING, WHETHER EXPOSED, IN CONDUIT OR RACEWAY IS TO BE REMOVED TO THE GREATEST EXTENT POSSIBLE.
2. THE ELECTRICAL CONTRACTOR IS TO DIRECT THE REMOVAL OF THE ABOVE LISTED WORK.

MEP COMPONENT ANCHORAGE NOTE:

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA- APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A1.18 THROUGH 1617A1.26 AND ASCE 7- 16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7 SECTION 13.3 AS DEFINED IN ASCE 7 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. THE MEP DESIGN PROFESSIONAL ENGINEER RESPONSIBLE FOR CONTENT ON THESE SHEETS HAS VERIFIED THAT THE DESIGN METHODS IDENTIFIED BELOW ARE IN ACCORDANCE WITH DSA IR 16-13.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐MD☐PP☐ E ☒ OPTION 1: PROJECT SPECIFIC DESIGN

MP☐MD☐PP☐ E ☐ OPTION 2: DESIGN BASED ON OSHPD OPM, WITHIN PROJECT SUBMITTAL

MP☐MD☐PP☐ E ☐ OPTION 3: DESIGN BASED ON OSHPD OPM, DEFERRED SUBMITTAL

IDENTIFICATION STAMP
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DATE: 01/14/2026

DSA APPROVAL STAMP

DESIGN PROFESSIONAL STAMP

DLR GROUP

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DLR GROUP PROJECT #: 75-25240-00

JOHNSON CONSULTING ENGINEERS, INC.
Power | Lighting | Multimedia
Communications | Data | Networking
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REGISTERED PROFESSIONAL ENGINEER
No. E 14781
Exp. 6-30-2027
ELECTRICAL
STATE OF CALIFORNIA

#25046 1/8/2026

MVUSD ATHLETIC LIGHTING UPGRADE

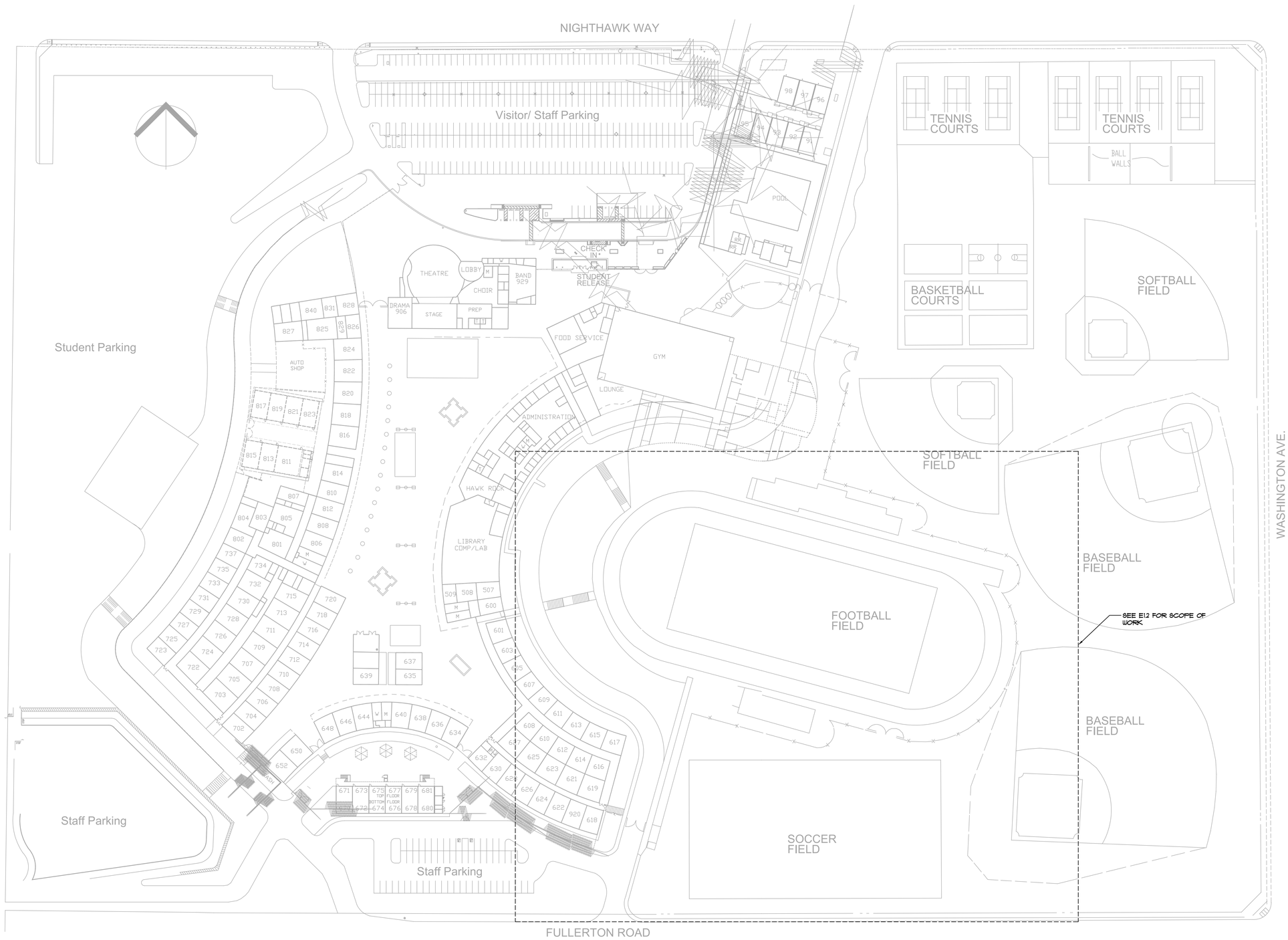
Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

SUBMITTAL TITLE

Project Issue Date
Revisions

ELECTRICAL LEGEND AND NOTES

E1.0



OVERALL SITE PLAN

SCALE: 1" = 60' - 0"

1
E1.1

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APP. 04-125019 INC:
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SS ☑ FLS ☑ ACS ☐
DATE: 01/14/2026

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OVERALL SITE PLAN

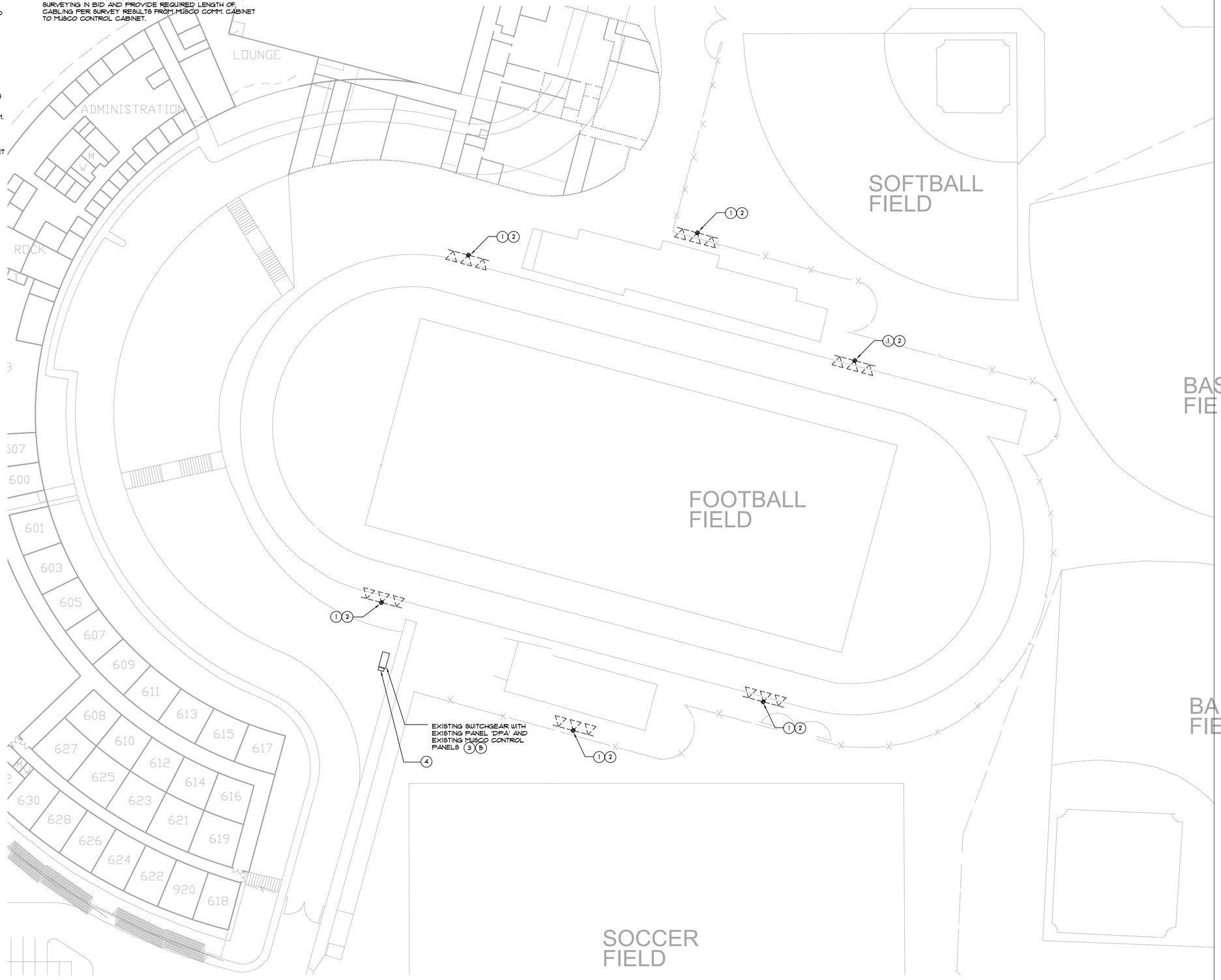
E1.1

KEY NOTES:

1. EXISTING SPORTS LIGHTING POLE TO REMAIN. REMOVE EXISTING 'MUSCO' LIGHTS, CROSSARMS, CAPS, BRACKETS AND ALL OTHER EXISTING LIGHT FIXTURES SUPPORTS. REPLACE WITH NEW MUSCO LED LIGHTS, MUSCO FACTORY PROVIDED CROSSARMS, CAPS, BRACKETS AND ALL OTHER NEW LED LIGHT FIXTURE SUPPORTS . PROVIDE ALL REQUIRED MUSCO FACTORY WIRING EXTENSIONS, WIRING HARNESS, BRACKETS AND ALL NECESSARY PARTS TO MAKE A COMPLETE MUSCO SPORTS LIGHTING SYSTEM. EXTEND EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS TO NEW LED LIGHT FIXTURES AS REQUIRED. COORDINATE ADDITIONAL REQUIREMENTS AND FIXTURE AIMING WITH MUSCO. PROVIDE BIRD SPIKES ON TOP OF MUSCO POLES, CROSS ARMS AND ALL NEW MUSCO LED LIGHT FIXTURES.
2. DISCONNECT AND REMOVE EXISTING BALLAST ENCLOSURE AND REPLACE WITH NEW COMPLETE AND FULLY FUNCTIONAL LED DRIVER ENCLOSURES AS REQUIRED.
3. ALL EXISTING CONDUCTORS TO REMAIN. EXTEND TO NEW MUSCO CONTROL CABINET AS REQUIRED. REMOVE EXISTING MUSCO CONTROL SWITCH. PROVIDE (2) 20A/1P BREAKERS IN EXISTING 208V/3PH PANEL AND EXTEND TO MUSCO CONTROL CABINET AND COMM. CABINET. PROVIDE 3/4"C. 2 #12, 1 #12 GND. FROM EACH BREAKER TO ASSOCIATED CABINET.
4. NEMA 3R MUSCO CONTROL CABINET AND NEMA 3R MUSCO COMM. CABINET. MOUNT TO SIDE OF EXISTING SWITCHBOARD.
5. PROVIDE (1) WP/GFI DUPLEX RECEPTACLE IN SECTION CONTAINING BREAKERS FOR SPORTS LIGHTING ON SIDE PANEL BEYOND DEADFRONT COVER. PROVIDE CUSTOM MADE BRACKET FOR MUSCO CONTROL TOUCH SCREEN. COORDINATE EXACT BRACKET WITH MUSCO.

GENERAL NOTES:

1. ALL JUNCTION BOXES SHOWN ON FLOOR PLAN SHALL BE NEMA 3R UNLESS OTHERWISE NOTED.
2. REFERENCE E7.1 FOR ADDITIONAL WIRING REQUIREMENTS.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UG FULL BOXES AND CONDUIT ROUTING. ROUTINGS SHOWN ON PLAN ARE BASED ON AS-BUILT DRAWINGS. CONTRACTOR SHALL PROVIDE ADDITIONAL LOCATING AND SURVEYING IN BID AND PROVIDE REQUIRED LENGTH OF CABLING PER SURVEY RESULTS FROM MUSCO COMM. CABINET TO MUSCO CONTROL CABINET.



PARTIAL SITE PLAN

SCALE: 1" = 30' - 0"

1 / E1.2

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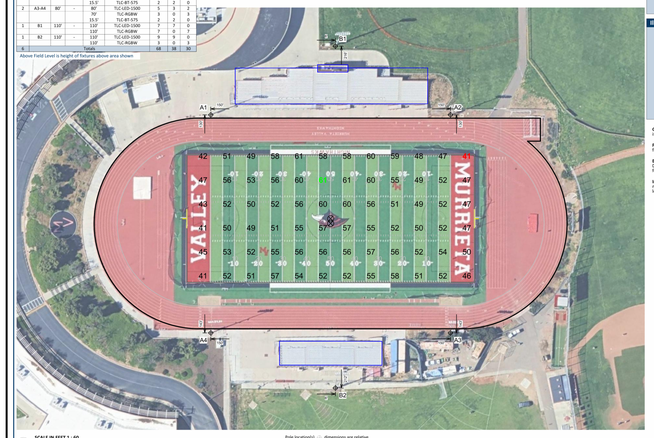
ENLARGED SITE PLAN

E1.2

Equipment List For Areas Shown

Qty	Structure No.	Size	Grade Elevation	Mean Field Level	Fixture Type	Optics	Tags Grid	Other Grids
2	A1-A2	80'	-	80'	TLC-LED-1500	6	6	0
				70'	TLC-RGBW	3	0	3
				15.5'	TLC-BT-575	2	2	0
2	A3-A4	80'	-	80'	TLC-LED-1500	5	0	5
				70'	TLC-RGBW	3	3	0
				15.5'	TLC-BT-575	2	0	2
1	B1	110'	-	110'	TLC-LED-1500	7	7	0
				110'	TLC-RGBW	3	0	3
1	B2	110'	-	110'	TLC-LED-1500	9	9	0
				110'	TLC-RGBW	3	0	3
6	Totals					68	46	22

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 60

0' 60' 120'

Pole location(s): dimensions are relative to (L,I) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #241559D • 19-Dec-25

Murrieta Valley HS

Murrieta, CA

Grid Summary

Name: Football
Size: 360' x 160'
Spacing: 30.0' x 30.0'
Height: 1.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**50**
Scan Average:	53.70
Maximum:	61
Minimum:	41
Avg/Min:	1.30
Guaranteed Max/Min:	**2**
Max/Min:	1.51
UG (adjacent pts):	1.28
CU:	0.57
No. of Points:	72
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	**38**
Total Load:	46.90 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

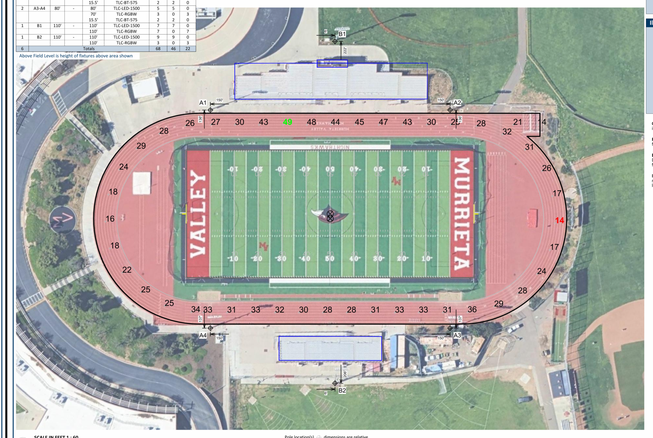
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ILLUMINATION SUMMARY

Equipment List For Areas Shown

Qty	Structure No.	Size	Grade Elevation	Mean Field Level	Fixture Type	Optics	Tags Grid	Other Grids
2	A1-A2	80'	-	80'	TLC-LED-1500	6	6	0
				70'	TLC-RGBW	3	0	3
				15.5'	TLC-BT-575	2	2	0
2	A3-A4	80'	-	80'	TLC-LED-1500	5	5	0
				70'	TLC-RGBW	3	0	3
				15.5'	TLC-BT-575	2	0	2
1	B1	110'	-	110'	TLC-LED-1500	7	7	0
				110'	TLC-RGBW	3	0	3
1	B2	110'	-	110'	TLC-LED-1500	9	9	0
				110'	TLC-RGBW	3	0	3
6	Totals					68	46	22

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 60

0' 60' 120'

Pole location(s): dimensions are relative to (L,I) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #241559D • 19-Dec-25

Murrieta Valley HS

Murrieta, CA

Grid Summary

Name: Track
Size: Irregular
Spacing: 30.0' x 30.0'
Height: 1.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**30**
Scan Average:	29.46
Maximum:	49
Minimum:	21
Avg/Min:	1.36
Max/Min:	**2.44**
UG (adjacent pts):	0.00
CU:	0.16
No. of Points:	40
FIXTURE INFORMATION	
Applied Circuits:	A, B
No. of Fixtures:	**46**
Total Load:	58.18 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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ILLUMINATION SUMMARY

Equipment List For Areas Shown

Qty	Structure No.	Size	Grade Elevation	Mean Field Level	Fixture Type	Optics	Tags Grid	Other Grids
2	A1-A2	80'	-	80'	TLC-LED-1500	6	0	6
				70'	TLC-RGBW	3	3	0
				15.5'	TLC-BT-575	2	0	2
2	A3-A4	80'	-	80'	TLC-LED-1500	5	0	5
				70'	TLC-RGBW	3	3	0
				15.5'	TLC-BT-575	2	0	2
1	B1	110'	-	110'	TLC-LED-1500	7	0	7
				110'	TLC-RGBW	3	3	0
1	B2	110'	-	110'	TLC-LED-1500	9	0	9
				110'	TLC-RGBW	3	3	0
6	Totals					68	22	46

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 30

0' 30' 60'

Pole location(s): dimensions are relative to (L,I) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #241559D • 19-Dec-25

Murrieta Valley HS

Murrieta, CA

Grid Summary

Name: Home Bleacher
Spacing: 5.0' x 5.0'
Height: 9.4' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**19.85**
Maximum:	22
Minimum:	3
Avg/Min:	6.60
Max/Min:	**7.33**
UG (adjacent pts):	0.00
CU:	0.27
No. of Points:	424
FIXTURE INFORMATION	
Applied Circuits:	A
No. of Fixtures:	**22**
Total Load:	14.08 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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ILLUMINATION SUMMARY

EXISTING EMERGENCY LIGHTING FIXTURES MOUNTED ON LIGHTING POLE ARE TO REMAIN.

Equipment List For Areas Shown

Qty	Structure No.	Size	Grade Elevation	Mean Field Level	Fixture Type	Optics	Tags Grid	Other Grids
2	A1-A2	80'	-	80'	TLC-LED-1500	6	6	0
				70'	TLC-RGBW	3	3	0
				15.5'	TLC-BT-575	2	2	0
2	A3-A4	80'	-	80'	TLC-LED-1500	5	5	0
				70'	TLC-RGBW	3	3	0
				15.5'	TLC-BT-575	2	2	0
1	B1	110'	-	110'	TLC-LED-1500	7	7	0
				110'	TLC-RGBW	3	3	0
1	B2	110'	-	110'	TLC-LED-1500	9	9	0
				110'	TLC-RGBW	3	3	0
6	Totals					68	68	0

Above Field Level is height of fixtures above area shown



SCALE IN FEET 1 : 80

0' 80' 160'

Pole location(s): dimensions are relative to (L,I) reference point(s)

ENGINEERED DESIGN By: D.Palmer • File #241559D • 19-Dec-25

Murrieta Valley HS

Murrieta, CA

Grid Summary

Name: Project Spill @ 3ft.
Spacing: 30.0'
Height: 1.0' above grade

Illumination Summary

INITIAL HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**0.0652**
Maximum:	0.35
Minimum:	0.01
Avg/Min:	6.50
No. of Points:	42
FIXTURE INFORMATION	
Applied Circuits:	A,B,C
No. of Fixtures:	**46**
Total Load:	72.26 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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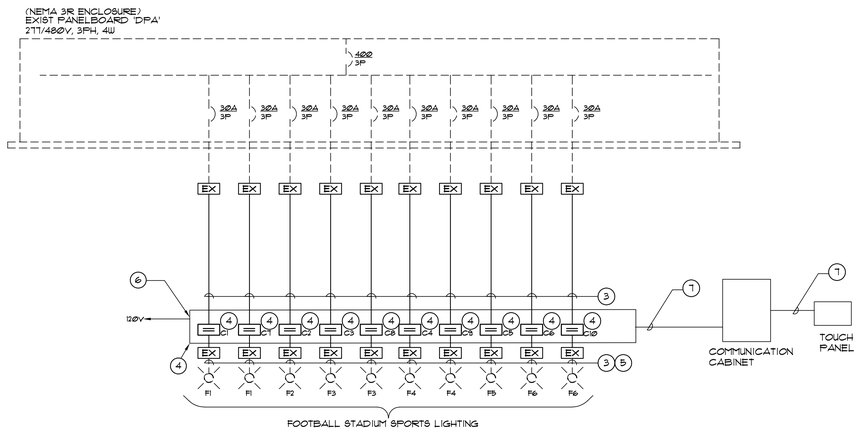
SUBMITTAL TITLE

Project Issue Date

Revisions

FOOTBALL FIELD - PHOTOMETRICS

E1.3



SPORTS LIGHTING ONE LINE DIAGRAM
NO SCALE

1
E7.1

GENERAL NOTES:

1. UNLESS WHERE OTHERWISE NOTED, ALL WORK INDICATED ON THESE DRAWINGS SHALL BE CONSIDERED NEW WORK.

KEY NOTES:

1. PROVIDE FIELD INSTALLED NEUTRAL KIT IN THE CABINET AND CONNECT IN AND OUT NEUTRAL CONDUCTORS.
2. DISCONNECT AND REMOVE EXISTING 40A/3P BREAKER AND REPLACE WITH A NEW 30A/3P BREAKER. RECONNECT EXISTING CIRCUIT TO NEW BREAKER AS REQUIRED.
3. EXISTING INCOMING LIGHTING CIRCUIT CONDUIT AND CONDUCTORS TO REMAIN. EXTEND TO DESIGNATED LIGHTING CONTACTOR DOWNSTREAM SHOWN ON ONE LINE DIAGRAM AS REQUIRED.
4. RECONNECT INCOMING AND OUTGOING LIGHTING CIRCUITS AND EMERGENCY LIGHTING CIRCUITS TO ALL NEW CONTACTORS IN NEW SPORTS LIGHTING ENCLOSURE AS REQUIRED.
5. EXTEND AND RECONNECT EXISTING OUTGOING LIGHTING CIRCUITS TO DESIGNATED CONTACTORS UPSTREAM IN SPORTS LIGHTING CONTROL CABINETS AND POLE NEW DRIVER ENCLOSURES AND LED LIGHTING FIXTURE HEADS DOWNSTREAM SHOWN ON ONE LINE DIAGRAM AS REQUIRED.
6. EXISTING CONTROL CABINET TO BE REPLACED WITH NEW CONTROL CABINET. RECONNECT TO EXISTING 120V CONTROL CIRCUIT.
7. PROVIDE WIRING PER MANUFACTURER'S REQUIREMENTS.

600Volt Feeder Schedule

I.D.	Type	Ampacity	Copper Conduit	Copper Conductors	Aluminum Conduit	Aluminum Conductors
2A		20	(1) 3/4"	3 # 12, 1# 12 Gnd	NA	NA
2B		20	(1) 3/4"	4 # 12, 1# 12 Gnd	NA	NA
3A		30	(1) 3/4"	3 # 10, 1# 10 Gnd	NA	NA
3B		30	(1) 3/4"	4 # 10, 1# 10 Gnd	NA	NA
4A		40	(1) 1"	3 # 8, 1# 10 Gnd	NA	NA
4B		40	(1) 1"	4 # 8, 1# 10 Gnd	NA	NA
5A		50	(1) 1"	3 # 6, 1# 10 Gnd	NA	NA
5B		50	(1) 1"	4 # 6, 1# 10 Gnd	NA	NA
6A		60	(1) 1 1/4"	3 # 4, 1# 8 Gnd	NA	NA
6B		60	(1) 1 1/4"	4 # 4, 1# 8 Gnd	NA	NA
7A		70	(1) 1 1/4"	3 # 4, 1# 8 Gnd	NA	NA
7B		70	(1) 1 1/4"	4 # 4, 1# 8 Gnd	NA	NA
8A		80	(1) 1 1/4"	3 # 3, 1# 8 Gnd	NA	NA
8B		80	(1) 1 1/4"	4 # 3, 1# 8 Gnd	NA	NA
9A		90	(1) 1 1/2"	3 # 2, 1# 8 Gnd	NA	NA
9B		90	(1) 1 1/2"	4 # 2, 1# 8 Gnd	NA	NA
10A		100	(1) 1 1/2"	3 # 1, 1# 6 Gnd	NA	NA
10B		100	(1) 1 1/2"	4 # 1, 1# 6 Gnd	NA	NA
12A		125	(1) 2"	3 # 1, 1# 6 Gnd	(1) 2"	3 # 2/0, 1# 3 Gnd
12B		125	(1) 2"	4 # 1, 1# 6 Gnd	(1) 2"	4 # 2/0, 1# 3 Gnd
15A		150	(1) 2"	3 # 1/0, 1# 6 Gnd	(1) 2"	3 # 3/0, 1# 3 Gnd
15B		150	(1) 2"	4 # 1/0, 1# 6 Gnd	(1) 2"	4 # 3/0, 1# 3 Gnd
17A		175	(1) 2"	3 # 2/0, 1# 6 Gnd	(1) 2"	3 # 4/0, 1# 3 Gnd
17B		175	(1) 2"	4 # 2/0, 1# 6 Gnd	(1) 2"	4 # 4/0, 1# 3 Gnd
20A		200	(1) 3"	3 # 3/0, 1# 4 Gnd	(1) 3"	3 # 250, 1# 2 Gnd
20B		200	(1) 3"	4 # 3/0, 1# 4 Gnd	(1) 3"	4 # 250, 1# 2 Gnd
22A		225	(1) 3"	3 # 4/0, 1# 4 Gnd	(1) 3"	3 # 300, 1# 2 Gnd
22B		225	(1) 3"	4 # 4/0, 1# 4 Gnd	(1) 3"	4 # 300, 1# 2 Gnd
25A		250	(1) 3"	3 # 250, 1# 4 Gnd	(1) 3"	3 # 350, 1# 2 Gnd
25B		250	(1) 3"	4 # 250, 1# 4 Gnd	(1) 3"	4 # 350, 1# 2 Gnd
30A		300	(1) 3"	3 # 350, 1# 4 Gnd	(1) 3"	3 # 400, 1# 2 Gnd
30B		300	(1) 3"	4 # 350, 1# 4 Gnd	(1) 3"	4 # 400, 1# 2 Gnd
2C		20	(1) 1/2"	2 # 12, 1# 12 Gnd	NA	NA
3C		30	(1) 3/4"	2 # 10, 1# 10 Gnd	NA	NA
4C		40	(1) 3/4"	2 # 8, 1# 10 Gnd	NA	NA
5C		50	(1) 1"	2 # 6, 1# 10 Gnd	NA	NA
6C		60	(1) 1 1/4"	2 # 4, 1# 8 Gnd	NA	NA
7C		70	(1) 1 1/4"	2 # 4, 1# 8 Gnd	NA	NA
8C		80	(1) 1 1/4"	2 # 3, 1# 8 Gnd	NA	NA
9C		90	(1) 1 1/4"	2 # 2, 1# 8 Gnd	NA	NA
10C		100	(1) 1 1/4"	2 # 1, 1# 6 Gnd	NA	NA
15C		150	(1) 2"	2 # 1/0, 1# 6 Gnd	NA	NA
17C		175	(1) 2"	2 # 2/0, 1# 6 Gnd	NA	NA

NOT APPLICABLE

600V FEEDER SCHEDULE GENERAL NOTES:

1. ALL CONDUCTOR SHALL BE PROVIDED WITH TYPE THHN-2 INSULATION. REFERENCE SPECIFICATION SECTION 26 05 19 (16120) FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE 60 DEGREE COPPER/ALUMINUM RATED TERMINATION FOR ALL FEEDERS SIZED WITH 4 OR SMALLER CONDUCTORS. PROVIDE 75 DEGREE COPPER/ALUMINUM RATED TERMINATIONS FOR ALL FEEDERS SIZED WITH 4 OR LARGER CONDUCTORS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING LUG CONFIGURATION AN ALL EQUIPMENT, BREAKER OF DISCONNECTS TO MATCH FEEDER CONFIGURATIONS INDICATED.
4. WHERE MULTIPLE CONDUIT QUANTITIES ARE INDICATED, CONDUCTOR QUANTITIES AND SIZES SHOWN IN SCHEDULE SHALL BE PROVIDED IN EACH CONDUIT.

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SPORTS LIGHTING ONE LINE DIAGRAM

E7.1

GENERAL NOTES:

SCOPE OF WORK

Remove and replace existing top pole sections, including crossarms and fixtures. Remove and replace ballast boxes.

APPLICABLE BUILDING CODE

All construction and workmanship shall conform to the 2022 California Building Code, California Code of Regulations – Title 24, Parts 1 & 2.

Wind Design Data:
- Vult = 96 MPH (Exposure C); Vasd = 74 MPH (Exposure C)
- Risk Category = II

Seismic Design Data:
- Ie = 1.0
- Risk Category = II (Self Supporting Poles)
- S_s = 1.571
- S_1 = 0.586
- Site Class = D–Default
- S_{DS} = 1.257
- S_{D1} = 1.004
- Seismic Design Category = D
- Basic Seismic–Force–Resisting System = Non–Building Structure, not similar to buildings
- R = 1.5
- Ω = 1.5
- ρ_x = 1.0
- P_p = 1.5

GENERAL CONSTRUCTION

These notes shall be used in conjunction with the plans and any discrepancies shall be brought to the attention of the Engineer.

Contractor must check all dimensions, clearances and job conditions before starting work. Engineer shall be notified immediately of any discrepancies or possible deficiencies.

The drawings and specifications represent the finished structure. All bracing, temporary supports, shoring, etc., is the sole responsibility of the Contractor. Observation visits to the job site by the Engineer do not include inspection of construction procedures. The Contractor is solely responsible for all construction methods and for safety conditions at the worksite. These visits shall not be construed as continuous and detailed inspections.

Design, material, equipment, and products other than those described below or indicated on the drawings may be considered for use, provided prior approval is obtained from the School District, Engineer, and the Division of the State Architect.

All changes in approved plans shall be made by means of addenda and construction change documents (CCD) approved by the Division of State Architect, as required by Section 4–338, Part 1, Title 24, CCR. All CCD documents shall be signed by the Architect and Owner. Addenda shall be signed by architect and the design professional in general responsible charge.

Substitutions shall be considered as a CCD and shall be approved by DSA prior to fabrication or use.

A Class 3 Project Inspector employed by the District (Owner) and approved by the Division of State Architect shall provide continuous inspection of the work, the duties of the inspector are defined in Section 4–342, Part 1, Title 24, CCR.

All Tests And Inspections shall be performed by an Independent lab employed by the School District and approved by DSA.

Reference pole location drawings provided by the Architect, Structural Engineer, or Electrical Engineer for existing pole locations.

STEEL POLE

All miscellaneous structural steel items conform to AISC 360–16.

All weldment conforms with AWS D1.1 specification for GMAW fillet utilizing E70S–X filler metal or SAW fillet utilizing F7XX–EXXX or F8XX–EXXX filler metal.
GMAW procedure conforms to AWS A5.18.
SAW procedure conforms to AWS A5.23.

All field welding shall be in compliance with AWS D1.1 specification.

All welding shall be continously inspected by an AWS CWI certified inspector approved by DSA.

All exposed steel shall be hot dipped galvanized to ASTM A123 latest standards.

TESTING AND INSPECTION

Testing and inspection in accordance with Title 24, Part 1 & Part 2 & project DSA 103 form.

STEEL MATERIALS:
Structural steel – 2202A.1 & 2205A.1
Cold formed steel – 2210A.1
Identification – 2202A.1
High strength bolt identification – table 1705A.2.1 & DSA IR 17–9

STEEL QUALITY:
Tests of structural steel & cold formed steel – 2202A.1
Tests of high strength bolts, nuts, & washers – 2213A.1 & DSA IR 17–8

STRUCTURAL STEEL INSPECTIONS: Table 1705A.2.1
Shop fabrication inspection – 1704A2.5
Welding – 1705A.2.5, DSA IR 17–3 and AWS D1.1.
High strength bolt installation – Table 1705A.2.1 & DSA IR 17–9
(Including Skidmore–Wilhelm bolt tension pre–installation verification testing)
(Note, ALL WELDING SHALL BE CONTINUOUSLY INSPECTED BY AN AWS CWI CERTIFIED INSPECTOR APPROVED BY DSA)

NOTE: Field verify existing pole conditions & repair any defects, if found. Repair procedures and details to be reviewed and approved by Structural Engineer of Record and DSA.

These plans are for construction approval. An application number and approval of these drawings by the Division of The State Architect of California must be secured to build from these plans.

INDEX OF SHEETS

MT1	NOTES
MS1	(E)80A POLE DETAILS
MS2	(E)110B POLE DETAILS
MD1	ATTACHMENT DETAILS
MD2	ATTACHMENT DETAILS
MD3	ATTACHMENT DETAILS

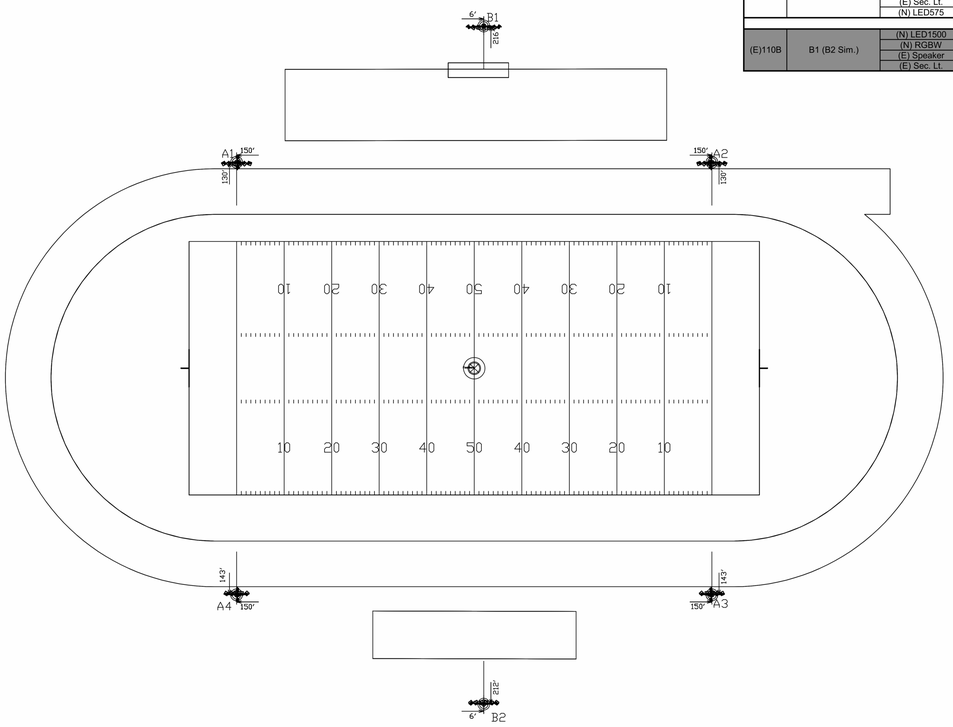
Comparative Analysis

Existing Pole Configurations

Pole Type	Existing Pole Designation	Fixture Type	Number Fixtures	EPA/ Fixture sq ft	Total Fixture EPA	Weight/Fixture lbs	Total Fixture Weight, lbs	Ballast Weight, lbs	Pole Weight lbs	Total Fixtures, and Pole Weight, lbs
(E)80A	A1-A4	(E) Musco Lights	14	2.80	45.5	25.0	465	700	2359	3524
		(E) Speaker	1	2.31		35.0				
		(E) Sec. Lt.	4	1.00		20.0				
(E)110B	B1, B2	(E) Musco Lights	16	2.80	51.1	25.0	515	800	4698	6013
		(E) Speaker	1	2.31		35.0				
		(E) Sec. Lt.	4	1.00		20.0				

Proposed Pole Configurations

Pole type	Existing Pole (This Application)	Fixture Type	Number Fixtures	EPA/ Fixture sq ft	Total Fixture EPA	Weight/Fixture lbs	Total Fixture Weight, lbs	ECE Weight, lbs	Pole Weight lbs	Total Fixtures, and Pole Weight, lbs	Weight Comparative Analysis WT	Weight Comparative Analysis % Difference	EPA Comparative Analysis EPA	EPA Comparative Analysis % Difference
(E)80A	A1, A2 (A3, A4 Sim.)	(N) LED1500	6	3.52	38.4	90.2	926	325	2359	3610	Increase < 10% OK	2.4	OK	-15.6
		(N) RGBW	3	2.14		53.7								
		(E) Speaker	1	2.31		35.0								
		(E) Sec. Lt.	4	1.00		20.0								
		(N) LED575	2	2.27		54.5								
(E)110B	B1 (B2 Sim.)	(N) LED1500	7	3.31	52.7	90.0	1186	525	4698	6409	Increase < 10% OK	6.6	Increase < 5% OK	3.0
		(N) RGBW	7	3.31		63.0								
		(E) Speaker	1	2.31		35.0								
		(E) Sec. Lt.	4	1.00		20.0								



POLE ORIENTATION PLAN

N.T.S.

NOTE: THIS PLAN IS A PICTORAL REPRESENTATION OF THE SITE LAYOUT.
REFERENCE APPROPRIATE ARCHITECTURAL SITE PLAN FOR ALL NECESSARY INFORMATION.

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Murrieta Valley HS
FIELD LIGHTING
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musco Lighting
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211 2nd Avenue West
Oskaloosa, Iowa 52577
800/825–6020

DRAWING TITLE: NOTES
SCALE: SEE PLAN
REVISIONS
REFERENCE:

PROJECT NO. 241559

DATE: 01/08/2026

DRAWN BY: dipalmer

DRAWING NO. MT1
1 OF 6

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#25046 1/8/2026

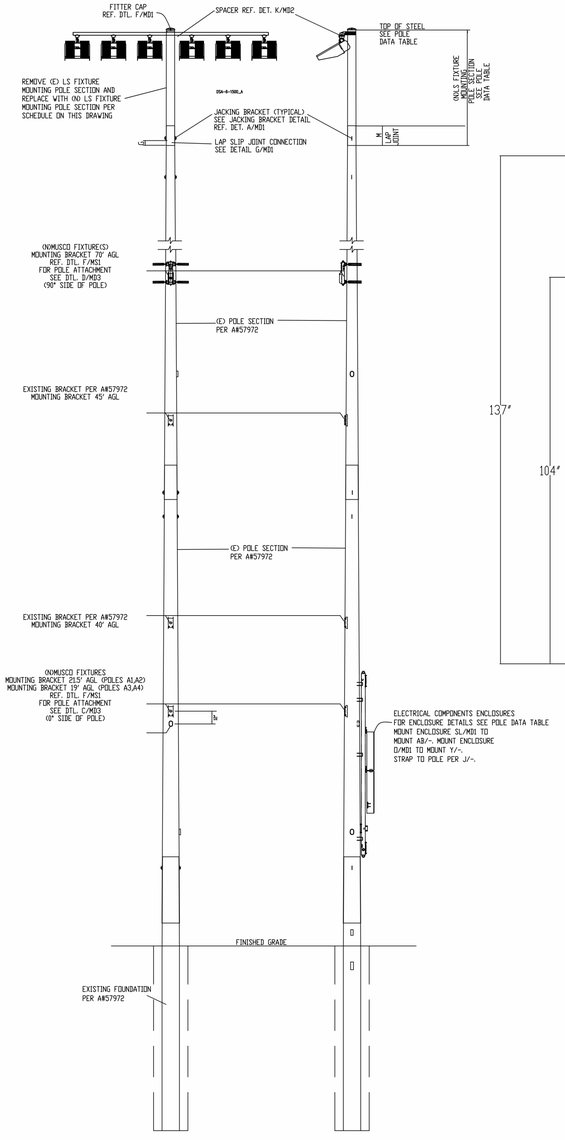
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Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

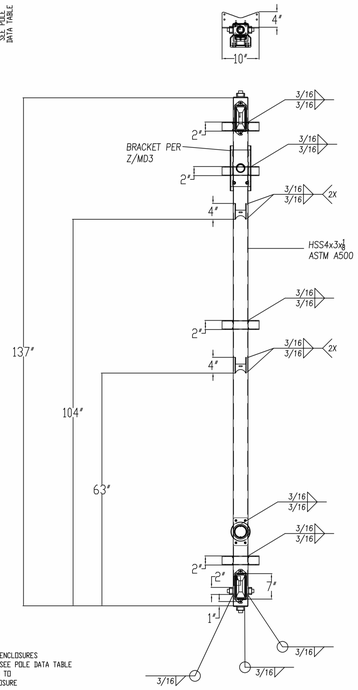
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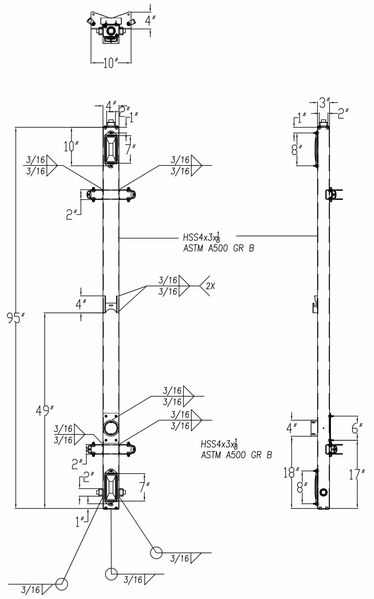
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Revisions

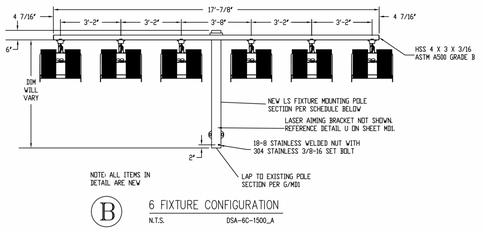
SPORTS LIGHTING - MT1

E10.1

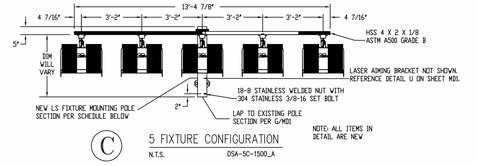




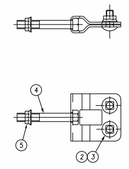




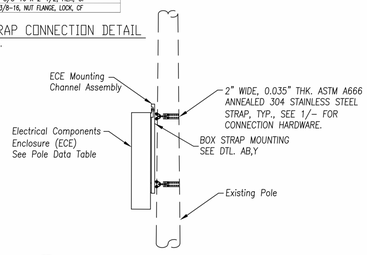
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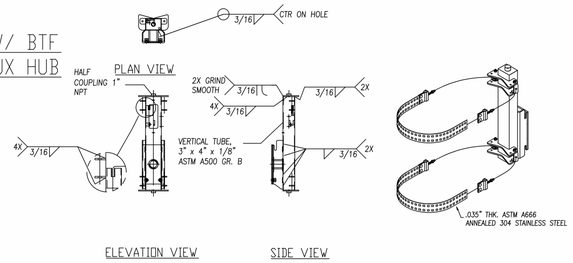
C 5 FIXTURE CONFIGURATION
N.T.S. DSA-5C-1500_A



1 STRAP CONNECTION DETAIL
N.T.S.



J BALLAST BOX CONNECTION DETAIL
N.T.S.



AB 6P,6PX-LP W/ BTF ECE AUX HUB
N.T.S.

ELEVATION VIEW SIDE VIEW

Y 4P W/O BTF ECE AUX NON-HUB
N.T.S.

F AUX. FIXTURE MOUNTING
N.T.S.

NOTATION	DIMENSION LSS80A
G	1'-6"
M	1'-10" NOM. 1'-2" MIN.

POLE SCHEDULE

SITE LOCATION	POLE MARK	REFERENCE LOCATION	POLE TYPE	(N)FIXTURE CONFIGURATION	BALLAST BOX REQUIREMENTS
SEE SITE PLAN (BY OTHERS)	A1-A2	SEE POLE ORIENTATION PLAN	(E)LSS80A	6 - SEE DETAIL B/MS1	SEE DETAIL SL3L_D/M01
	A3-A4	SEE POLE ORIENTATION PLAN	(E)LSS80A	5 - SEE DETAIL C/MS1	SEE DETAIL SL3L_D/M01

DSA-POLESCHE_C

(E)POLE DATA TABLE

POLE TYPE	PIECE MARK	MAX NUMBER OF X-Arms	POLE SECTION	TOP O.D. (INCHES)	BTM. O.D. (INCHES)	OVERALL LENGTH	STRAIGHT LENGTH	TAPER LENGTH	THICKNESS (INCHES)	TOP OF STEEL NOMINAL	ASTM REFERENCE
(E)LSS80A	(N)LS-2005	1	FIXTURE MOUNTING	5.500"	6.115"	5'-3"	3'-5"	1'-10"	.120	80'-6"	A513 (Fy=38ksi)

DSA-808ST_J

DLR GROUP PROJECT #: 75-25240-00

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Exp. 6-30-27
STRUCTURAL
STATE OF CALIFORNIA

Murrieta Valley HS
FIELD LIGHTING
Murrieta CA

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DRAWING TITLE: POLE DETAIL
SCALE: SEE PLAN
REVISIONS:
REFERENCE:

PROJECT NO. 241559

DATE: 01/08/2026

DRAWN BY: dipalmer

DRAWING NO. MS1
2 OF 6

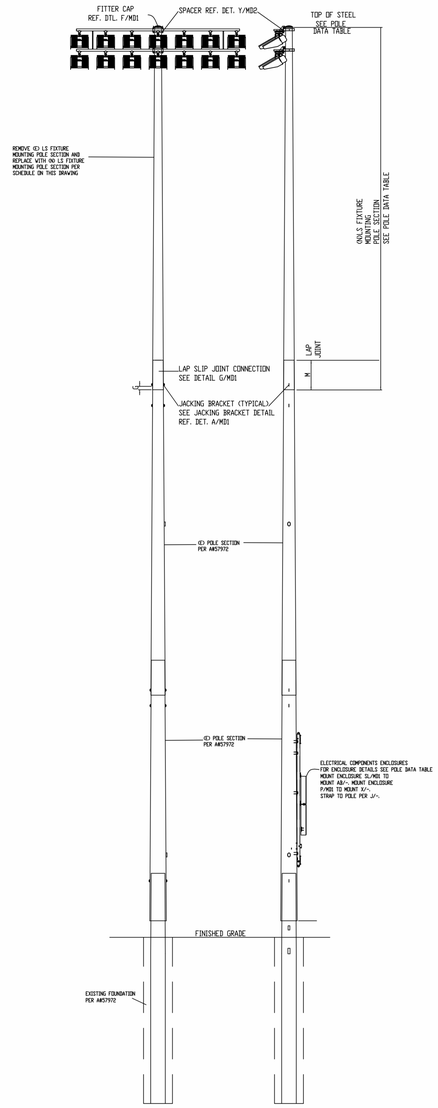
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Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

SUBMITTAL TITLE

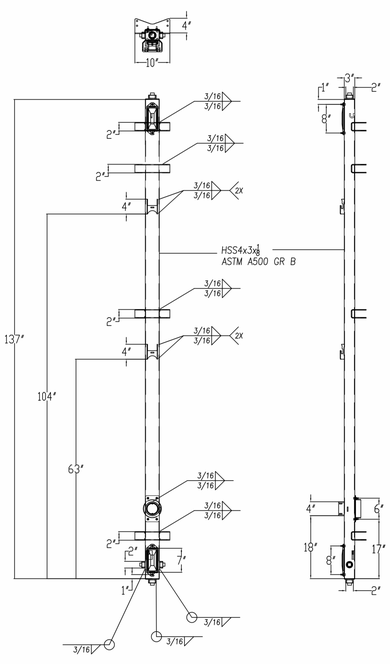
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Revisions

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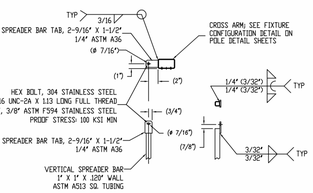
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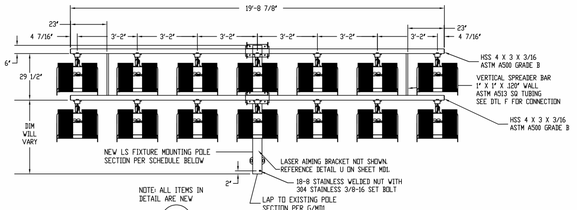
(E)LSS110B POLE FRONT VIEW (E)LSS110B POLE SIDE VIEW
N.T.S. N.T.S. DSA-110CBASE_A



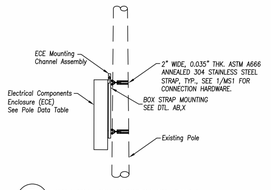
AB N.T.S. 6P,6PX-LP W/O BTF ECE AUX HUB



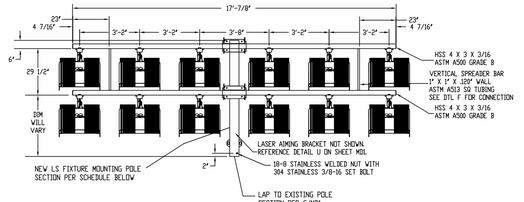
F BOLT ON SPREADER BAR DETAIL
SCALE: N.T.S. DSA-SpreaderBarBoltOn-LED_A



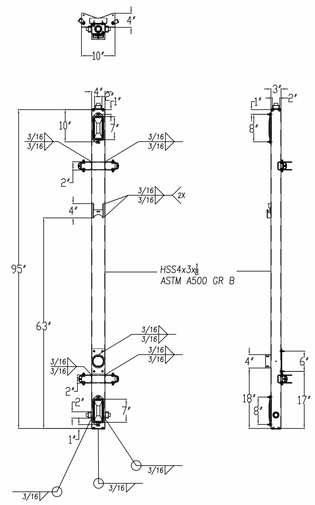
B 14 FIXTURE CONFIGURATION
N.T.S. DSA-B14C-1500_A



J BALLAST BOX CONNECTION DETAIL
N.T.S.



C 12 FIXTURE CONFIGURATION
N.T.S. DSA-B12C-1500_A



X 6P W/O BTF ECE AUX NON-HUB
N.T.S.

NOTATION	DIMENSION
	LSS110B
G	1'-6"
M	3'-2 3/8" NOM. 2'-1 3/8" MIN.

POLE SCHEDULE

SITE LOCATION	POLE MARK	REFERENCE LOCATION	POLE TYPE	FIXTURE CONFIGURATION	BALLAST BOX REQUIREMENTS
SEE SITE PLAN (BY OTHERS)	B1	SEE POLE ORIENTATION PLAN	(E)LSS110B	14 - SEE DETAIL B/MS2	SEE DETAIL SL.SL.P/MD1
	B2	SEE POLE ORIENTATION PLAN	(E)LSS110B	12 - SEE DETAIL C/MS2	SEE DETAIL SL.SL./MD1

DSA-POLESCHE_C

(E)POLE DATA TABLE

POLE TYPE	PIECE MARK	MAX NUMBER OF X-Arms	POLE SECTION	TOP O.D. (INCHES)	BTM. O.D. (INCHES)	OVERALL LENGTH	STRAIGHT LENGTH	TAPER LENGTH	THICKNESS (INCHES)	TOP OF STEEL NOMINAL	ASTM REFERENCE
(E)LSS110B	(N)LS-2013	2	FIXTURE MOUNTING	7.000"	7.548"	5'-3"	3'-3"	2'-0"	.125	108'-2 3/8"	A513 (Fy=38ksi)

DSA-110BOT_J

DSA-SSR_A

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STATE OF CALIFORNIA
25046 1/8/2026

Murrieta Valley HS
FIELD LIGHTING
Murrieta CA

DLR GROUP PROJECT #: 75-25240-00

MVUSD ATHLETIC LIGHTING UPGRADE
Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

SUBMITTAL TITLE

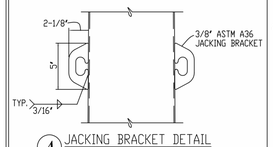
Project Issue Date
Revisions

SPORTS LIGHTING - MS2

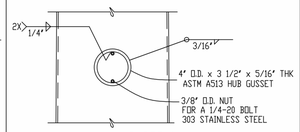
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SCALE: SEE PLAN
REVISIONS:
REFERENCE:

PROJECT NO. 241559
DATE: 01/08/2026
DRAWN BY: dipalmer
DRAWING NO. MS2
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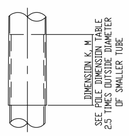
E10.3



A JACKING BRACKET DETAIL
N.T.S. DSA-3RDSHEET_T



B HUB DETAIL
N.T.S. DSA-3RDSHEET_T



G SLIP JOINT CONNECTION DETAIL
N.T.S. DSA-LAP

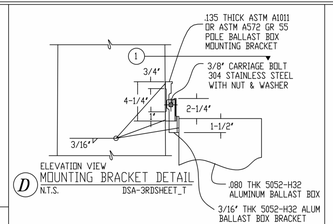


POLE LONGITUDINAL SEAM WELD
DETAIL TYPICAL CONDITION *
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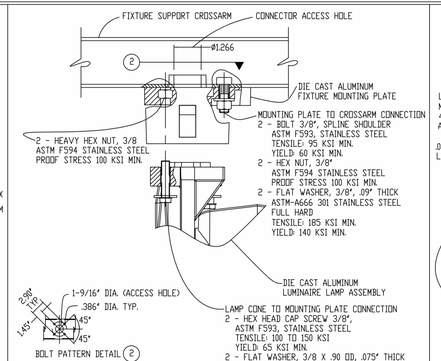


POLE LONGITUDINAL SEAM WELD DETAIL
AT LAP SPLICES (FEMALE END) *
N.T.S. DSA-3RDSHEET_T

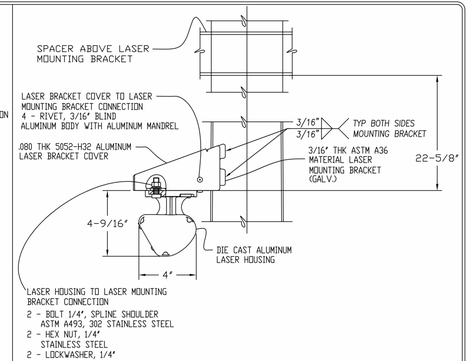
* NOTE- 100% PENETRATION SEAM WELDS MAY BE PROVIDED FULL LENGTH OF POLE SHAFTS PROVIDED WPS'S ARE QUALIFIED BY TEST.



D ELEVATION VIEW
MOUNTING BRACKET DETAIL
N.T.S. DSA-3RDSHEET_T



E LUMINAIRE ATTACHMENT DETAIL
N.T.S. DSA-3RDSHEET_T

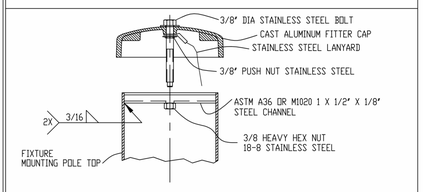


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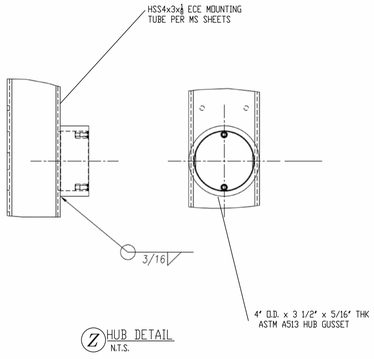
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N.T.S. STRU-4PX_E

SL BALLAST BOX CONNECTION DETAIL
N.T.S. STRU-6P6PXLP_E

P BALLAST BOX CONNECTION DETAIL
N.T.S. STRU-6PX_D



F FITTER CAP DETAIL
N.T.S. DSA-3RDSHEET_T



Z HUB DETAIL
N.T.S.

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STRU-MD1

IDENTIFICATION STAMP
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APP. 04-125019 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☐
DATE: 01/14/2026

DSA APPROVAL STAMP

DESIGN PROFESSIONAL STAMP

DLR GROUP PROJECT #: 75-25240-00

JOHNSON CONSULTING ENGINEERS, INC.
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STATE OF CALIFORNIA

#25046 1/8/2026

Murrieta Valley HS
FIELD LIGHTING
Murrieta CA

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DRAWING TITLE: ATTACHMENT DETAILS
SCALE: SEE PLAN
REVISIONS
REFERENCE:

PROJECT NO. 241559
DATE: 01/08/2026
DRAWN BY: dipalmer
DRAWING NO. MD1
4 OF 6

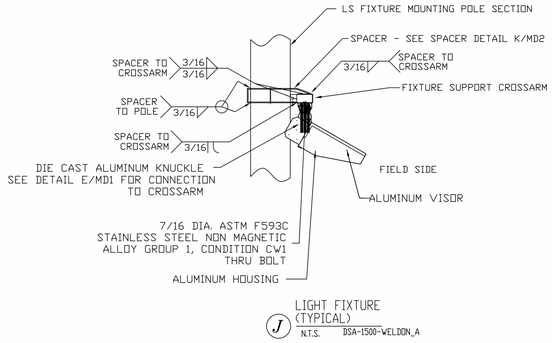
MVUSD ATHLETIC LIGHTING UPGRADE
Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

SUBMITTAL TITLE

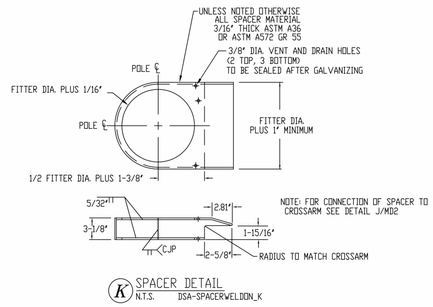
Project Issue Date
Revisions

SPORTS LIGHTING - MD1

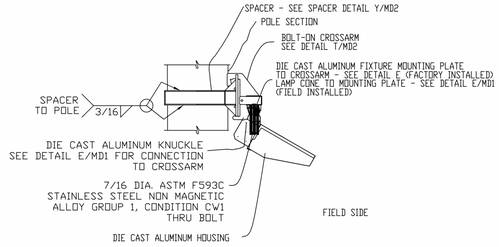
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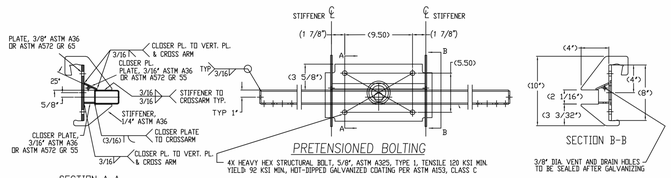
J LIGHT FIXTURE (TYPICAL)
N.T.S. DSA-1500-WELDON_A



K SPACER DETAIL
N.T.S. DSA-SPACERWELDON_K



Z LIGHT FIXTURE (TYPICAL)
SCALE: N.T.S.
DSA-1500-BOLTON_A

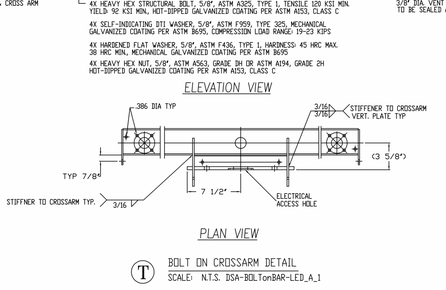


4X HEAVY HEX STRUCTURAL BOLT, 5/8", ASTM A325, TYPE 1, TENSILE 120 KSI MIN. YIELD 92 KSI MIN, HOT-DIPPED GALVANIZED COATING PER ASTM A153, CLASS C

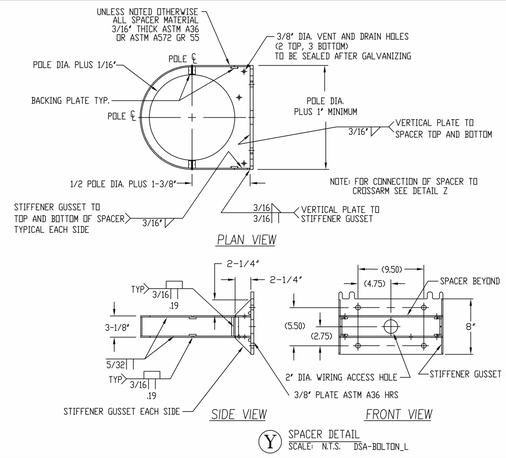
4X SELF-INDICATING DTI WASHER, 5/8", ASTM F959, TYPE 325, MECHANICAL GALVANIZED COATING PER ASTM B695, COMPRESSION LOAD RANGE 19-23 KIPS

4X HARDENED FLAT WASHER, 5/8", ASTM F436, TYPE 1, HARDNESS: 45 HRC MAX. 38 HRC MIN, MECHANICAL GALVANIZED COATING PER ASTM B695

4X HEAVY HEX NUT, 5/8", ASTM A563, GRADE 2H OR ASTM A194, GRADE 2H HOT-DIPPED GALVANIZED COATING PER ASTM A153, CLASS C



T BOLT ON CROSSARM DETAIL
SCALE: N.T.S. DSA-BOLTonBAR-LED_A_1



Y SPACER DETAIL
SCALE: N.T.S. DSA-BOLTON_L

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STRU-ROE

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DRAWING TITLE: ATTACHMENT DETAILS
SCALE: SEE PLAN
REVISIONS
REFERENCE

PROJECT NO. 241559
DATE: 01/08/2026
DRAWN BY: dipalmer
DRAWING NO. MD2
5 OF 6

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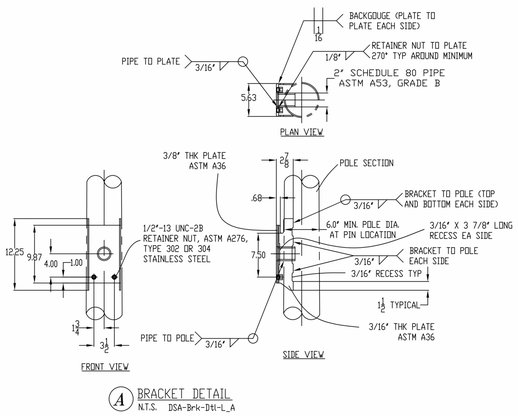
MVUSD ATHLETIC LIGHTING UPGRADE
Murrieta Valley High School, 42200 Nighthawk Wy, Murrieta, CA 92562

SUBMITTAL TITLE

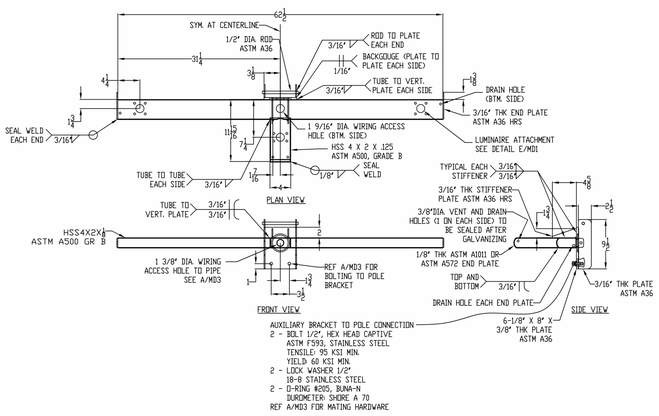
Project Issue Date
Revisions

SPORTS LIGHTING - MD2

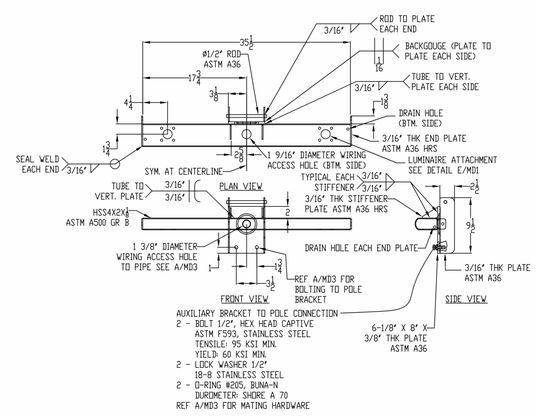
E10.5



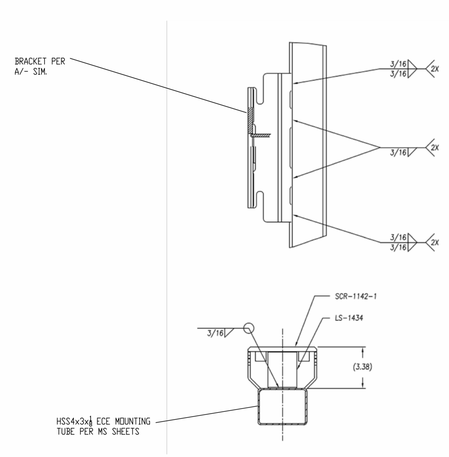
A BRACKET DETAIL
N.T.S. DSA-Brk-Dtl-L_A



D 3P AUXILIARY MOUNTING BRACKET
N.T.S. DSA-3P FIXTURE MOUNT_G



C 2P AUXILIARY MOUNTING BRACKET
N.T.S. DSA-2P FIXTURE MOUNT_F



Z BRACKET DETAIL
N.T.S.

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Murrieta Valley HS
FIELD LIGHTING
Murrieta CA

REGISTERED PROFESSIONAL ENGINEER ★ No. 4306 Exp. 6-30-27 ★ STRUCTURAL ★ STATE OF CALIFORNIA

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800/825-6020

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PROJECT NO. 241559

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DRAWN BY: dipalmer

DRAWING NO. MD3
6 OF 6

STRU-MD3

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E10.6