

DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE "AISC MANUAL OF STEEL CONSTRUCTION" (AISC) AND "AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC), AS CONTAINED IN THE LATEST EDITION OF "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AISC 360, AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AISC 303.

STEEL TYPE SHALL BE AS SPECIFIED IN THE STRUCTURAL STEEL SCHEDULE UNLESS NOTED OTHERWISE.

ALL CONNECTIONS NOT SHOWN SHALL CONFORM TO THE "AISC MANUAL OF STEEL CONSTRUCTION" AND SHALL BE SUBMITTED ON SHOP DRAWINGS FOR REVIEW BY SEOR PRIOR TO FABRICATION.

FABRICATOR SHALL BE LICENSED IN CONFORMANCE WITH THE BUILDING CODE AND IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION. ANY FABRICATOR SUPPLYING MORE THAN 1 TON OF STEEL SHALL BE LICENSED IN CONFORMANCE WITH THE BUILDING CODE AND IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.

1. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), AS WELL AS THE THE CODE OF STANDARD PRACTICE FOR STRUCTURAL STEEL BUILDINGS' AISC 360, AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AISC 303.
2. STEEL TYPE SHALL BE AS SPECIFIED IN THE STRUCTURAL STEEL SCHEDULE UNLESS NOTED OTHERWISE.
3. ALL CONNECTIONS NOT SHOWN SHALL CONFORM TO THE "AISC MANUAL OF STEEL CONSTRUCTION" AND SHALL BE SUBMITTED ON SHOP DRAWINGS FOR REVIEW BY SEOR PRIOR TO FABRICATION.
4. FABRICATOR SHALL BE LICENSED IN CONFORMANCE WITH THE BUILDING CODE AND IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION. ANY FABRICATOR SUPPLYING MORE THAN 1 TON OF STEEL SHALL BE AISC CERTIFIED.
5. ALL STRUCTURAL AND MISCELLANEOUS STEEL PERMANENTLY EXPOSED TO WEATHER OR MOISTURE SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION UNLESS A WEATHER PROOF COATING IS SPECIFIED. STEEL IN CONTACT WITH TREATED WOOD SHALL BE GALVANIZED. STAINLESS AND WEATHERING STEELS WHERE SPECIFIED ARE EXEMPT.
6. BOLT AND THREADED ROD ASSEMBLIES PERMANENTLY EXPOSED TO WEATHER OR MOISTURE SHALL BE HOT DIP GALVANIZED PER ASTM F2329 UNLESS A FIELD APPLIED WEATHER PROOF COATING IS SPECIFIED. GALVANIZED NUTS ARE TO BE OVERTAPPED WHERE REQUIRED TO AVOID STRIPPING. GALVANIZED BOLTS SHALL BE LUBRICATED AND TESTED PRIOR TO SHIPMENT. ALL THREADED COMPONENTS OF FASTENER ASSEMBLY SHALL BE GALVANIZED USING THE SAME PROCESS.
7. COATED STEEL SURFACES SHALL BE PROTECTED DURING CONSTRUCTION AND REPAIRED AS REQUIRED.
8. USE THE APPROPRIATE NUT AND WASHER TYPE, GRADE AND FINISH FOR THE SPECIFIED BOLT. BOLTS WITH UPSET THREADS ARE NOT ALLOWED UNLESS EXPLICITLY SPECIFIED. PROVIDE ASTM A194 OR 2H NUTS WITH ASTM A193 OR B7 THREADED ROD.
9. PLACE NONSHRINK GROUT UNDER ALL BASE PLATES AND ALLOW TO CURE BEFORE APPLYING LOADS. PROVIDE NONSHRINK GROUT IN ALL JOINT VENT HOLES ON SHOP DRAWINGS WHERE REQUIRED. PRIME OR PLAIN STEEL TO BE IN DIRECT CONTACT WITH NONSHRINK GROUT SHALL BE CLEANED TO BARE METAL BEFORE GROUTING.
10. FOR STEEL EMBEDDED IN CONCRETE OR MASONRY WHICH WILL INTERFERE WITH CONTINUOUS REINFORCING BARS, REQUEST CLARIFICATION FROM THE SEOR WHETHER TO PROVIDE HOLES FOR PASSAGE. DO NOT CUT HOLES IN STRUCTURAL STEEL WITHOUT PRIOR APPROVAL OF SEOR.
11. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL STEEL FEATURES SUCH AS TABS, STUDS, WEEP HOLES OR OTHER ITEMS NOT SHOWN.
12. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SHALL COMPLY WITH AISC CODE OF STANDARD PRACTICE, SECTION 10.
13. WELDED HEADED STUDS, THREADED STUDS, AND DEFORMED BARS SHALL COMPLY WITH ASTM A108 OR A496 TYPE C BY NELSON, OR EQUIVALENT, AND WELDED IN ACCORDANCE WITH MANUFACTURERS' WELDING INSTRUCTIONS BY CERTIFIED WELDERS SO AS TO FULLY DEVELOP THE TENSILE CAPACITY OF THE CONNECTOR.
14. EMBEDDED ENDS OF ANCHORS IN CONCRETE OR GROUTED CMU SHALL BE HEADERS OR HAVE DOUBBLE NUTS LOCKED AGAINST EACH OTHER, UNO ON DRAWINGS.

### 51210 – HIGH STRENGTH BOLTS

1. UNLESS NOTED OTHERWISE WHEN BOLTING STEEL COMPONENTS, BOLTS 3/4" DIAMETER AND LARGER SHALL BE ASTM A325 / F1852 HIGH STRENGTH, BOLTS 5/8" DIAMETER AND SMALLER SHALL BE A307.
2. JOINT ASSEMBLIES USING HIGH-STRENGTH BOLTS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE "AISC (RSCC) SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS".
3. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325 / F1852 OR ASTM A490 / F2280 AS FOLLOWS: TYPE 1 OR 3 NUTS SHALL CONFORM TO ASTM A563 GRADE DH OR A194 OR 2H, AND WASHERS SHALL CONFORM TO ASTM A306 WITH GRADE, TYPE AND FINISH TO MATCH THE SPECIFIED BOLT.
4. PAINT SHALL NOT BE PERMITTED ON CONTACT SURFACES UNLESS NOTED OTHERWISE. CONTACT SURFACES OF BOLTED PARTS SHALL BE DESCALED AND FREE OF DIRT, OIL, BURRS, PITS, AND OTHER DEFECTS WHICH PREVENT SOLID SEATING OF PARTS.
5. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO THE AISC SNUG TIGHT CONDITION UNLESS SPECIFIED AS SLIP-CRITICAL (SC).
6. SLIP-CRITICAL BOLTS SHALL HAVE CLASS "A" FAYING SURFACES. SLIP-CRITICAL JOINT ASSEMBLIES SHALL BE FULLY PRE-TENSIONED BY TURN-OF-NUT TIGHTENING, CALIBRATED WRENCH TIGHTENING, TENSION CONTROL BOLT ASSEMBLIES CONFORMING TO ASTM F1852 / F2280, OR BY TENSION INDICATOR WASHERS CONFORMING TO ASTM F2280.
7. HIGH STRENGTH BOLT ASSEMBLIES PERMANENTLY EXPOSED TO WEATHER OR MOISTURE SHALL BE SPECIFIED AS ASTM A325 / F1852 SHALL BE TYPE 1 GALVANIZED OR ASTM F2280 OR D695, AND ASTM A490 / F2280 SHALL BE TYPE 3 PLAIN WITH GRADE DH13 NUTS.

CONCRETE SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH ACI 318 AND ACI 301 LATEST EDITION AND THE CONSTRUCTION DOCUMENTS.

CONCRETE MIXING OPERATIONS SHALL CONFORM TO ASTM C94. QUANTITIES OF MATERIALS SHALL BE CERTIFIED BY A LICENSED WEIGHT-MASTER.

RETAIN AN APPROVED TESTING LABORATORY, ACCEPTABLE TO THE OWNER, TO PREPARE CONCRETE MIX DESIGNS ACCORDING TO GOVERNING CODE AND THE CONSTRUCTION DOCUMENTS. ALL CONCRETE MIX DESIGNS SHALL BE PREPARED AND SEALLED BY A LICENSED CALIFORNIA CIVIL ENGINEER AND SUBMITTED TO THE SEOR FOR REVIEW PRIOR TO CONCRETE PLACEMENT. NEW MIX DESIGNS ARE REQUIRED WHEN THERE IS A CHANGE IN MATERIALS BEING USED. MIX DESIGNS SHALL CLEARLY STATE THE INTENDED LOCATION FOR USE.

1. CONCRETE SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH ACI 318 AND ACI 301 LATEST EDITION AND THE CONSTRUCTION DOCUMENTS.
2. CONCRETE MIXING OPERATIONS SHALL CONFORM TO ASTM C94. QUANTITIES OF MATERIALS SHALL BE CERTIFIED BY A LICENSED WEIGHT-MASTER.
3. RETAIN AN APPROVED TESTING LABORATORY, ACCEPTABLE TO THE OWNER, TO PREPARE CONCRETE MIX DESIGNS ACCORDING TO THE MIX DESIGN CODE AND THE CONSTRUCTION DOCUMENTS. ALL CONCRETE MIX DESIGNS SHALL BE STAMPED AND SEALED BY A LICENSED CALIFORNIA CIVIL ENGINEER AND SUBMITTED TO THE SEOR FOR REVIEW PRIOR TO CONCRETE PLACEMENT. NEW MIX DESIGNS ARE REQUIRED FOR ALL MIXES THAT CHANGE MATERIALS BEING USED. MIX DESIGNS SHALL CLEARLY STATE THE INTENDED LOCATION FOR USE.
4. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED ON THE CONCRETE SCHEDULE. ALL CONCRETE TEST REPORTS SHALL BE SUBMITTED TO THE SEOR WITHIN 7 DAYS AFTER TESTING.
5. AGGREGATE SHALL BE HARDROCK FOR NORMAL WEIGHT CONCRETE (NWC) CONFORMING TO ASTM C33. THE UNIT WEIGHT OF NWC SHALL HAVE AN AIR-DRY EQUILIBRIUM DENSITY OF 145 ± 5 PCF. THE UNIT WEIGHT OF NWC SHALL BE CONFIRMED BY THE MIX DESIGN AND DOES NOT REQUIRE TESTING UNO.
6. AGGREGATE FOR SAND LIGHT WEIGHT CONCRETE (LWC) SHALL CONFORM TO ASTM C330. UNIT WEIGHT OF LWC SHALL NOT EXCEED 115 PCF MEASURED AIR-DRY EQUILIBRIUM DENSITY PER ASTM C867, OR 110 PCF MEASURED OVEN-DRY. THE UNIT WEIGHT OF LWC SHALL BE LAB TESTED FOR EACH MIX DESIGN AND AGGREGATE SOURCE.
7. COARSE AGGREGATE WITH A MAXIMUM SIZE OF 1/2 INCH OR LESS SHALL BE CRUSHED STONE.
8. PORTLAND CEMENT TYPE SHALL BE AS SPECIFIED IN THE CONCRETE SCHEDULE AND CONFORM TO ASTM C150, LOW ALKALI.
9. FLY ASH OR OTHER POZZOLANS CONFORMING TO ASTM C618 CLASS F MAY BE USED AS A PARTIAL REPLACEMENT FOR PORTLAND CEMENT UP TO A MAXIMUM OF 25% TOTAL CEMENTITIOUS MATERIAL BY WEIGHT WHEN THE MIX DESIGN IS PROPORTIONED BY FIELD EXPERIENCE OR TIAL MIXTURES.
10. WATER USED IN MIX SHALL BE POTABLE OR NONPOTABLE RECLAIMED/RECYCLED, CONFORMING TO ASTM C1602. PRIOR TO MIXING, FREE MOISTURE CONTENT OF AGGREGATES SHALL BE MEASURED, RECORDED, AND MIX WATER QUANTITY ADJUSTED ACCORDINGLY. MIX WATER AND FREE MOISTURE ON ALL MATERIALS USED SHALL NOT CONTAIN CHLORIDES OR ANY OTHER DELETERIOUS OR ODOROUS COMPOUNDS.
11. ADMIXTURES, WHEN USED FOR WATER REDUCTION AND SETTING TIME MODIFICATION SHALL CONFORM TO ASTM C494. SUPERPLASTICIZER SHALL CONFORM TO ASTM C1017.
12. SHRINKAGE REDUCING ADMIXTURES SHALL CONFORM TO ASTM C494, AND WHERE USED SHALL BE GRACO ELIPSE, EUCLID EUCON SRA, Sika CONTROL, OR APPROVED EQUAL. SPECIFIED MAXIMUM SHRINKAGE RATES SHALL BE LAB TESTED PER ASTM C157 FOR EACH MIX DESIGN AND AGGREGATE SOURCE.
13. WHERE SPECIFIED, AIR CONTENT SHALL BE SAMPLED AT THE POINT OF DISCHARGE AND FIELD TESTED PER ASTM C231, PRESSURE METHOD.
14. UNLESS OTHERWISE SPECIFIED, CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 5 INCHES WITHOUT ADMIXTURES, AND A MAXIMUM OF 8 INCHES WHERE WATER REDUCTION OR SUPERPLASTICIZER ADMIXTURES ARE USED. SLUMP SHALL BE MEASURED PER ASTM C143 AT THE POINT OF DELIVERY WITH 110 POUNDS PER SQUARE FOOT OF SELF-CONSOLIDATING CONCRETE SHALL HAVE A MAXIMUM SPREAD OF 26 INCHES AS MEASURED PER ASTM C1611.
15. FOR LIGHT WEIGHT CONCRETE SLABS AND FILL OVER DECK, MAXIMUM AIR CONTENT SHALL BE 3 PERCENT AND MAXIMUM SLUMP SHALL BE 5 INCHES, MEASURED WITH ADMIXTURES.

FOUNDATION DESIGN BASED UPON GEOTECHNICAL REPORT BY: CONVERSE CONSULTANTS  
TITLE: PROPOSED NEW FOOTBALL STADIUM PROJECT, LA MIRADA HIGH SCHOOL, 13520 ADELFA DRIVE  
LA MIRADA, CALIFORNIA  
CONVERSE PROJECT NO. 19-31-285-01, DATED: OCT. 24, 2019

THE CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS AND CONDITIONS INDICATED IN THE REPORT. NOTE THAT THE STRUCTURAL DOCUMENTS DO NOT NECESSARILY INDICATE ALL SUBGRADE PREPARATION AND UNDERLAYMENT REQUIREMENTS. THE GEOTECHNICAL ENGINEER IS NOT RESPONSIBLE FOR THE CONTRACTOR'S SPECIALTY REGARDING EXCAVATION, FRENCH DRAINAGE AND COMPACTION METHOD.

A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF THE CONSTRUCTION.

- FOUNDATION DESIGN BASED UPON GEOTECHNICAL REPORT BY: CONVERSE CONSULTANTS  
TITLE: PROPOSED NEW FOOTBALL STADIUM PROJECT, LA MIRADA HIGH SCHOOL, 13520 ADELA DRIVE  
LA MIRADA, CALIFORNIA  
CONVERSE PROJECT NO. 19-31-285-01, DATED, OCT. 24, 2019
2. THE CONTRACTOR SHALL CONFORM TO ALL RECOMMENDATIONS AND CONDITIONS INDICATED IN THE REPORT. NOTE THAT THE STRUCTURAL DOCUMENTS DO NOT NECESSARILY INDICATE ALL SUBGRADE PREPARATION AND UNDERLAYMENT REQUIREMENTS. SEE THE GEOTECHNICAL REPORT FOR SITE SPECIFIC RECOMMENDATIONS REGARDING UNDERLAYMENT AND SUBGRADE PREPARATION METHODS.
3. A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF THE CONSTRUCTION.
4. FOUNDATION BEARING AND FILL MATERIALS UNDER STRUCTURE SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER AND BUILDING INSPECTOR BEFORE PLACING CONCRETE.
5. UNLESS OTHERWISE STATED BY THE GEOTECHNICAL ENGINEER, EXISTING UNDOCUMENTED FILL WITHIN THE BUILDING FOOTPRINT SHALL BE REMOVED AND RECOMPACTED. TOPSOILS, ORGANIC MATERIAL, AND OTHER DEBRIS SHALL BE REMOVED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NATURALLY OCCURRING SLOTTED SOILS SHALL BE APPROVED AS FILL BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
6. CONTRACTOR SHALL COORDINATE BOTTOM OF FOOTINGS AND GRADE BEAMS WITH FINISH GRADE AND UTILITIES PRIOR TO EXCAVATION. COORDINATE WITH ARCHITECTURAL AND CIVIL PLANS FOR LOCATION OF FINISH GRADE, FINISH FLOOR, SLOPE AND DEPRESSIONS.
7. FOUNDATION ELEVATIONS AND OTHER OVEREXCAVATION REQUIREMENTS ON THE CONSTRUCTION DOCUMENTS SHALL BE USED FOR PRICING OF EXCAVATION. DEPTH OF REMOVAL WILL BE DETERMINED AS DIRECTED BY THE GEOTECHNICAL ENGINEER DURING GRADING.
8. ALL TRENCHES SHALL COMPLY WITH APPLICABLE OSHA REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND SERVICES WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SHALL PROTECT ALL UTILITY LINES, ETC. ENCOUNTERED DURING EXCAVATION.
9. SUBGRADE WITHIN THE BUILDING FOOTPRINT SHALL BE MECHANICALLY COMPACTED IN LAYERS WITH THE APPROVAL OF THE GEOTECHNICAL ENGINEER. BACKFILL JETTING OR FLOODING IS NOT PERMITTED.
10. BACKFILL BEHIND RETAINING WALLS SHALL BE PERFORMED AFTER NEW CONCRETE OR MASONRY HAS ATTAINED ITS FULL DESIGN STRENGTH. WALL DRAINAGE MUST BE PROVIDED, UNLESS OTHERWISE NOTED IN THE GEOTECHNICAL REPORT OR CONSTRUCTION DOCUMENTS PROVIDE A 1-2 INCH DRAIN WITH 1/2 INCH PERCENT SLOPE TO THE EXISTING GRADE. PROVIDE 1/2 INCH PERCENT DRAIN LINES TO THE BASE CONNECTED TO A DESIGNED STORM DRAINAGE SYSTEM.

MINIMUM FOOTING WIDTH:	1'-6" FOR CONTINUOUS WALL FOOTINGS 2'-0" FOR ISOLATED PAD / COLUMN FOOTINGS
MINIMUM FOOTING EMBEDMENT:	1'-6" BELOW LOWEST ADJACENT GRADE AND 1'-0" INTO CERTIFIED COMPACTED FILL OR APPROVED UNDISTURBED NATIVE SOIL.
MINIMUM SLAB-ON-GRADE RELATIVE COMPACTION PER ASTM D1557	90% UNDER FOUNDATIONS AND SLAB-ON-GRADE
MINIMUM SLAB-ON-GRADE:	5" THICK WITH #4 @ 1'-6" ON CENTER EACH WAY POSITIONED 2" CLEAR FROM TOP OF SLAB, ON PREPARED SUBGRADE.

ALLOWABLE SOIL BEARING:	2000 PSF (DL+LL) BEARING ON COMPACTED OR ENGINEERED FILL. AN ADDITIONAL ONE-THIRD INCREASE IS PERMITTED FOR WIND OR SEISMIC EFFECTS.
ALLOWABLE COEFFICIENT OF FRICTION:	0.4 AT FOUNDATIONS ON BEDROCK USED WITH DEAD LOAD FORCES ONLY. NO INCREASE IS PERMITTED FOR WIND OR SEISMIC EFFECTS.
ALLOWABLE PASSIVE SOIL PRESSURE:	150 PSF/FT OF DEPTH ON THE SIDES OF FOUNDATIONS POURED AGAINST COMPACTED FILL. A ONE-THIRD INCREASE IS PERMITTED FOR WIND AND SEISMIC EFFECTS. (MAXIMUM 1,500 PSF)
LATERAL RESISTANCE:	PROVIDED BY FRICTION AND 80% PASSIVE EARTH PRESSURE. WHEN COMBINED REDUCE THE PASSIVE COMPONENT BY ONE-THIRD.
CANTILEVER RETAINING WALL DESIGN EQUIVALENT FLUID PRESSURE:	50 PSF/FT OF DEPTH - ACTIVE PRESSURE FOR LEVEL SOIL TRIANGULAR PRESSURE DISTRIBUTION. AN ADDITIONAL EQUIVALENT FLUID PRESSURE OF ONE (1) POUND PER CUBIC FOOT FOR EVERY TWO (2) DEGREES OF SLOPE INCLINATION. WALLS TALLER THAN 6 FEET SHOULD BE DESIGNED TO RESIST ADDITIONAL EARTH PRESSURE 25H.
PRESTRAINED WALL DESIGN EQUIVALENT FLUID PRESSURE:	65 PSF/FT OF DEPTH - ACTIVE PRESSURE FOR LEVEL SOIL TRIANGULAR PRESSURE DISTRIBUTION. AN ADDITIONAL EQUIVALENT FLUID PRESSURE OF ONE (1) POUND PER CUBIC FOOT FOR EVERY TWO (2) DEGREES OF SLOPE INCLINATION. WALLS TALLER THAN 6 FEET SHOULD BE DESIGNED TO RESIST ADDITIONAL EARTH PRESSURE 25H.

PLACING TOLERANCES AND BAR SUPPORTS SHALL CONFORM TO THE "MANUAL OF STANDARD PRACTICE" FOR REINFORCED CONCRETE CONSTRUCTION, BY CONCRETE REINFORCING STEEL INSTITUTE (CRSI).

ALL REINFORCING BAR (REBAR) STEEL SHALL BE DEFORMED ROUND BARS CONFORMING TO ASTM A615 OR ASTM A706, GRADE 60.

WELDED WIRE FABRIC (WVF) SHALL CONFORM TO ASTM A1064. ADJACENT WVF SHEETS SHALL BE LAPPED 12 INCHES MINIMUM.

PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING IN POSITIONS INDICATED. CHAIRS OR BOLSTERS WHICH BEAR AGAINST FORMS FOR EXPOSED SURFACES SHALL BE GREY COLORED PLASTIC COATED STEEL OR STAINLESS STEEL.

REINFORCING BARS SHALL BE KEPT CLEAN AND FREE OF OIL, GREASE AND LOOSE RUST OR MILL SCALE.

BEND REINFORCING BARS COLD. BARS PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.

ALL REINFORCING SHALL BE CONTINUOUS UNLESS NOTED OTHERWISE, WITH CONTACT LAP SPICES PER THE TYPICAL DETAILS OR AS SHOWN.

PROVISION FOR LAP SPICES OR DOWELS SHALL BE PROVIDED ACROSS ALL CONSTRUCTION JOINTS AND SHALL BE THE SAME GRADE, SIZE AND SPACING AS REINFORCING CONTINUING BEYOND UNLESS NOTED OTHERWISE. IN LIEU OF SPICES OR DOWELS, THE CONTRACTOR MAY SUBMIT FOR SEOR APPROVAL THE LOCATION AND MANUFACTURER DATA OF FORMSASERS OR COUPLERS PRIOR TO THEIR USE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS, PROJECT BOUNDARIES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CROSS-CHECK DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON OTHER CONSTRUCTION DOCUMENTS.

THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STRUCTURAL ENGINEER (SEOR) OF ANY DISCREPANCIES, OMISSIONS AND/OR OTHER CONSTRUCTION DOCUMENTS (PERMITS, SPECIFICATIONS OR EXISTING CONDITIONS). THE CONTRACTOR SHALL NOT ORDER MATERIAL, FABRICATE ELEMENTS, OR CONSTRUCT ANY PART OF THE STRUCTURE UNTIL THE SEOR HAS REVIEWED AND APPROVED THE DIMENSIONS. WHEN DIMENSIONS ARE UNCLEAR, REQUEST CLARIFICATION FROM THE SEOR AND ARCHITECT. DO NOT SCALE DRAWINGS. UNLESS NOTED OTHERWISE, PLAN DIMENSIONS INDICATE CENTERLINE OF BEAMS AND LIGHT FIXTURES ARE ASSUMED TO BE CENTERED TO FACE OF STUDS, AND FOOTINGS ARE CENTERED UNDER THE ELEMENTS THEY SUPPORT.

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS, PROJECT BOUNDARIES AND EXISTING CONDITIONS AT THE SITE PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PROVIDE A DETAILED DIMENSIONAL SCHEDULE OF ALL STRUCTURAL UTILITIES AND RELATED REQUIREMENTS ON OTHER CONSTRUCTION DOCUMENTS.
2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STRUCTURAL ENGINEER OF RECORD (SEOR) OF ANY CONFLICTS BETWEEN THE STRUCTURAL DRAWINGS AND OTHER CONSTRUCTION DOCUMENTS OR EXISTING CONDITIONS. THE CONTRACTOR SHALL NOT ORDER MATERIAL, FABRICATE ELEMENTS, OR CONSTRUCT ANY PORTION OF STRUCTURE THAT IS IN CONFLICT UNTIL RESOLUTION IS MADE.
3. WHEN DIMENSIONS ARE UNCLEAR, REQUEST CLARIFICATION FROM THE SEOR AND ARCHITECT. DO NOT SHOOT DIMENSIONS, UNLESS NOTED OTHERWISE. PLUMB DIMENSIONS INDICATE CENTERLINE OF BEAMS AND COLUMNS, LIGHT-FRAMED WALLS ARE DIMENSIONED TO FACE OF STUDS, AND FOOTINGS ARE CENTERED UNDER THE ELEMENTS THEY SUPPORT.
4. WHERE INFORMATION IS CONFLICTING WITHIN THE STRUCTURAL DOCUMENTS, SPECIFIC DETAILS SHALL GOVERN OVER TYPICAL DETAILS, WHICH HAVE PRECEDENCE OVER THESE NOTES, WHICH IN TURN OVERRULE PROJECT SPECIFICATIONS.
5. DETAILS NOTED AS TYPICAL ON STRUCTURAL SHEETS SHALL APPLY IN ALL CASES UNLESS OTHERWISE NOTED. DETAILS NOT NOTED OTHERWISE WHERE NO DETAIL IS INDICATED, CONSTRUCTION SHALL BE OF THE SAME NATURE AS FOR SIMILAR CASES OF CONSTRUCTION ON THIS PROJECT.
6. THE ARCHITECT AND SEOR SHALL INTERPRET THE CONSTRUCTION DOCUMENTS IN CASE OF POSSIBLE CONFLICT OR DISCREPANCY BETWEEN STRUCTURAL AND OTHER DISCIPLINES.
7. THE CONTRACTOR SHALL PROVIDE ALL NEW (N) MATERIALS TO PERFORM THE WORK INDICATED ON STRUCTURAL DOCUMENTS UNLESS NOTED AS EXISTING (E) OR SUPPLIED BY OTHERS. WRITTEN APPROVAL FROM THE SEOR SHALL BE OBTAINED PRIOR TO THE SUBSTITUTION OF ANY MATERIAL OR PRODUCT SPECIFIED ON THE STRUCTURAL DOCUMENTS.
8. STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOT INDICATE ANY CONSTRUCTION OR NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN OF TEMPORARY ERECTION AIDS, FORMWORK, SCAFFOLDING, SAFETY MEASURES, SHORING OF ANY PORTION OF WORK, AND PROTECTION OF ADJACENT PROJECTS. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. VISITS TO THE SITE BY THE SEOR SHALL NOT INCLUDE OBSERVATION OR INSPECTION OF THE ABOVE ITEMS AND DO NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE ABOVE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PERTINENT SECTIONS OF THE "CONSTRUCTION SAFETY ORDERS" ISSUED BY THE STATE OF CALIFORNIA, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. THE SEOR AND THE OWNER DO NOT ACCEPT ANY RESPONSIBILITY FOR THE CONTRACTORS FAILURE TO COMPLY WITH THESE.
10. ALL STRUCTURAL FRAMING SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND LEFT IN PLACE UNTIL ADEQUATE STRUCTURE IS CONSTRUCTED FOR STABILITY.
11. CONSTRUCTION MATERIALS AND ERECTION LOADS SHALL BE DISTRIBUTED WHEN PLACED ON THE STRUCTURE SUCH THAT THEY DO NOT EXCEED DESIGN LIVE LOADS OR RESULT IN AN UNBALANCED CONDITION. MAXIMUM PERMANENT EQUIPMENT WEIGHTS, POSTED LOAD LIMITS OR OTHER LIMITS SHALL NOT BE EXCEEDED. ALL STRUCTURAL DRAWINGS SHALL NOT BE EXCEEDED WITHOUT PRIOR WRITTEN APPROVAL BY THE SEOR. UNLESS SPECIFICALLY STATED, THE STRUCTURE IS NOT DESIGNED TO SUPPORT TRAFFIC FROM CRANES OR OTHER HEAVY CONSTRUCTION VEHICLES.
12. FLOOR, ROOF AND WALL OPENINGS, SLEEVES, INSERTS, EMBEDS, CONDUITS AND OTHER DISCIPLINE REQUIREMENTS MUST BE COORDINATED BEFORE THE CONTRACTOR PROCEEDS WITH CONSTRUCTION. THE EXISTING DRAIN, VENT, AND, IF APPLICABLE, FLOOR OR ROOF DEPRESSIONS, SLOPES, CURBS, PATHS, TRIGGERS, DRAINS AND OTHER FEATURES SHALL BE COORDINATED WITH THE CONSTRUCTION DOCUMENTS. THE STRUCTURAL DRAWINGS DO NOT NECESSARILY INDICATE ALL OF THESE ITEMS.
13. CORE DRILLING OF CONCRETE OR MASONRY IS NOT PERMITTED WITHOUT PRIOR APPROVAL BY THE SEOR. CORES, WHERE APPROVED SHALL NOT CUT REINFORCEMENT. THE CONTRACTOR SHALL PRESENT ALL CORES TO THE INSPECTOR OF RECORD (IOR) FOR VERIFICATION.
14. STRUCTURAL DRAWINGS INDICATE THE APPROXIMATE LOCATION OF EQUIPMENT AND THEIR SECONDARY FRAMING SUPPORTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK SUBMITTALS TO THE SEOR AND ARCHITECT AND PROVIDE NECESSARY DIMENSIONS IN A TIMELY MANNER TO ALL PARTIES AND DETAILERS INVOLVED.
15. PROVIDE A SHIM SPACE AT HEADERS AND JAMBS TO ALLOW FOR SETTLEMENT AND MOVEMENT OF FRAMING. INSTALL WINDOWS, DOORS AND OTHER INSET ITEMS AFTER BUILDING FLOORS ARE FULLY APPLIED.
16. EXPANSION AND SEPARATION JOINT DIMENSIONS SHOWN INDICATE THE CLEAR DISTANCE REQUIRED. COMPONENTS COVERING OR CROSSING SUCH JOINTS MUST ACCOMMODATE THE JOINT FULLY. CLOSURE OF JOINTS FOLLOWING TO TWICE THE DIMENSION SHOWN AS WELL AS RELATIVE LATERAL MOVEMENT ALONG THE JOINT. ALL PIPES, DUCTS, CONDUIT, ETC., CROSSING SUCH JOINTS SHALL HAVE FLEXIBLE LINES WITH ADEQUATE RANGE OF MOTION.

**DESIGN CODE:** STRUCTURAL DESIGN IS BASED UPON THE 2019 CALIFORNIA BUILDING CODE

AREA	BASIC LIVE LOADS	COMMENTS
ASSEMBLY	100 PSF	UNREDUCIBLE
ROOF	20 PSF	REDUCTION IN ACCORDANCE WITH CODE SPECIFIED ABOVE
CORRIDOR & EXIT STAIR	100 PSF	UNREDUCIBLE

ITEM	VALUE
SITE CLASS	D
MAPPED SPECTRAL ACCELERATION SS S1	1.640 0.563
DESIGN SPECTRAL ACCELERATION SDS	1.094

ANALYSIS AND DESIGN IS IN CONFORMANCE WITH THE PROVISIONS OF CHAPTER 16 - SECTION 1613A, EARTHQUAKE LOADS.

ITEM	VALUE
RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR	1.00
BASIC SEISMIC FORCE RESISTING SYSTEM	SPECIAL REINFORCED MASONRY SHEAR WALLS R=5, Qo=2.5, Co=3.5
SYSTEM FACTORS USED	R=5, Qo=2.5, Co=3.5 N-S, E-W
REDUNDANCY, $\rho$	1.3 N-S & E-W
DESIGN BASE SHEAR	0.29 W (STRENGTH)

ANALYSIS AND DESIGN IS IN CONFORMANCE WITH THE PROVISIONS OF CHAPTER 16A - SECTION 1609A, WIND LOADS.

ITEM	VALUE
PROCEDURE	ASCE 7-16 CH. 26
BASIC WIND SPEED	115 MPH
EXPOSURE	C

FOR ARCHITECTS/ENGINEERS WHO UTILIZE BLEACHER, MUSCO LIGHTING & SCOREBOARD DRAWINGS/PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (APPLICATION NO. A# 03-120551 FILE NO. 19-451)

☒ THE DRAWINGS LISTED IN THE INDEX ON THIS COVER PAGE

☐ THIS DRAWING, PAGE OF SPECIFICATIONS/CALCULATIONS

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 4-317(b))

I FIND THAT: ☒ BLEACHERS, MUSCO LIGHTING & SCOREBOARD DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET  
☐ THIS DRAWING OR PAGE

IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND	<input checked="" type="checkbox"/> IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND
HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.	<input checked="" type="checkbox"/> HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

SIGNATURE  DATE 8/17/2020  
ARCHITECT OR ENGINEER DESIGNATED TO BE IN  
GENERAL RESPONSIBLE CHARGE

HELENA L. JUBANY  
PRINT NAME

Kim Cavello 12/21/2020  
SIGNATURE DATE  
ARCHITECT OR ENGINEER DESIGNATED TO BE IN  
GENERAL RESPONSIBLE CHARGE

KIM CARVALHO  
PRINT NAME

SE 4896	12/31/2021
LICENSE NUMBER	EXPIRATION DATE