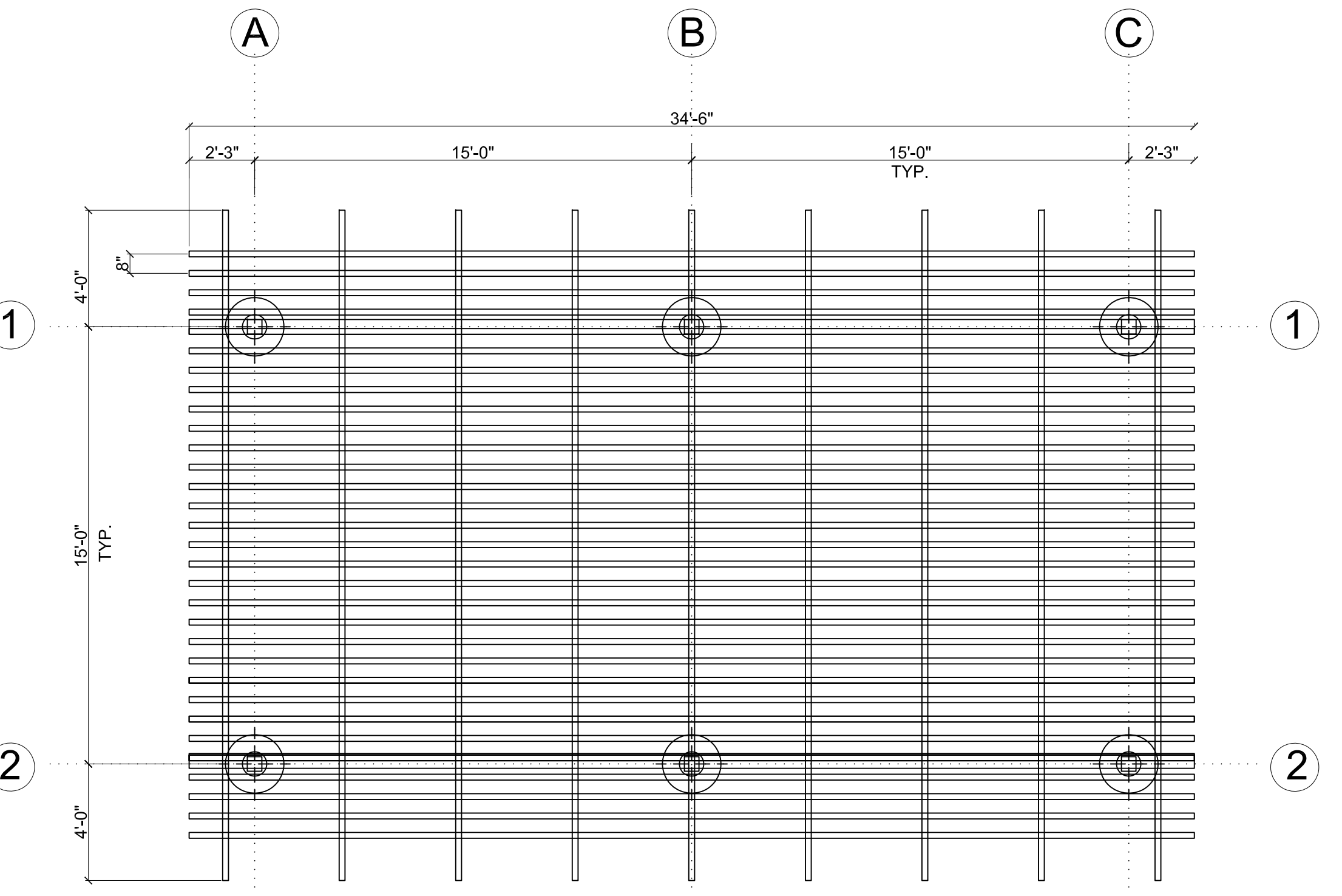
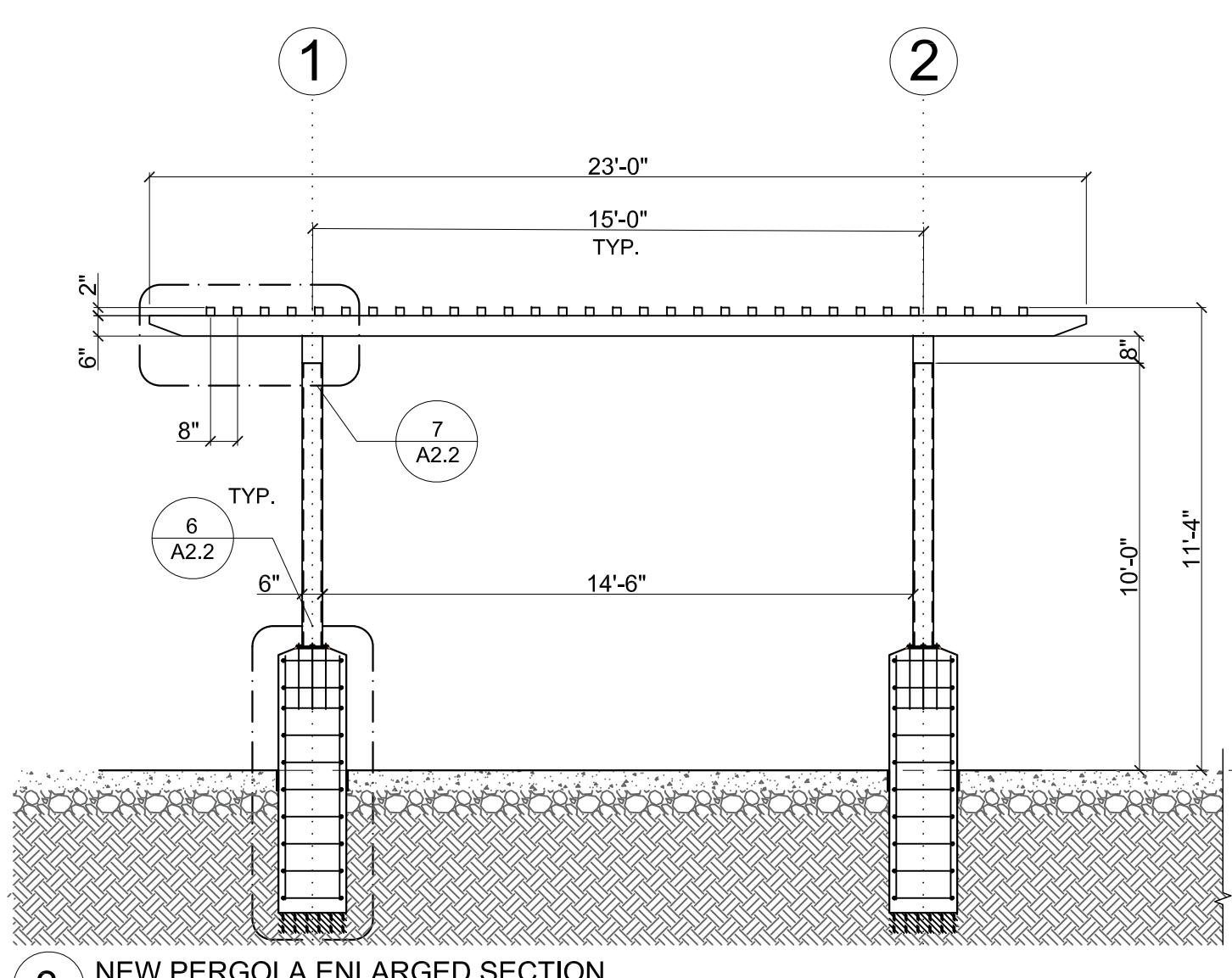


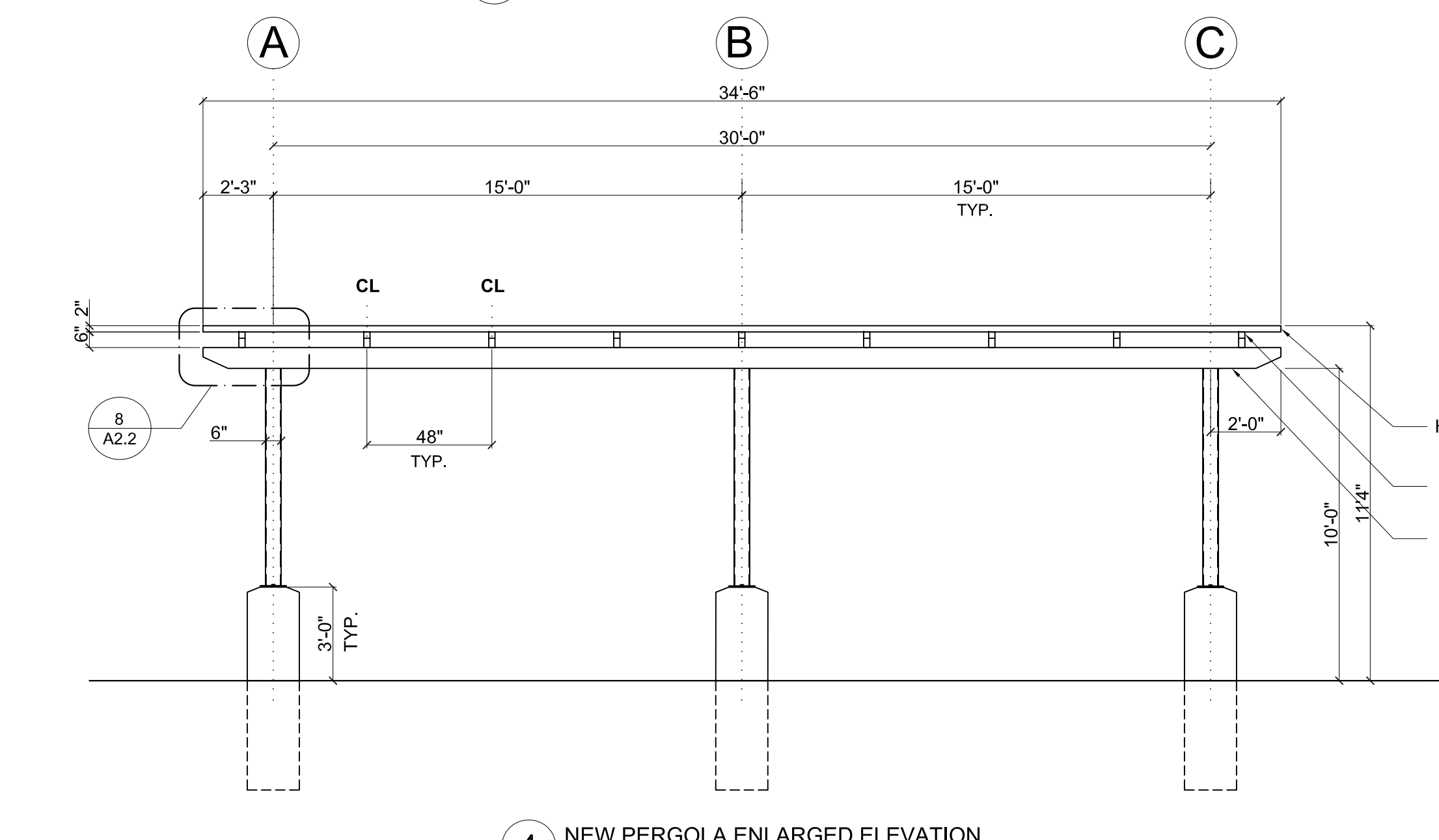
**1 NEW PERGOLA ENLARGED PLAN**  
1/4" = 1'-0"



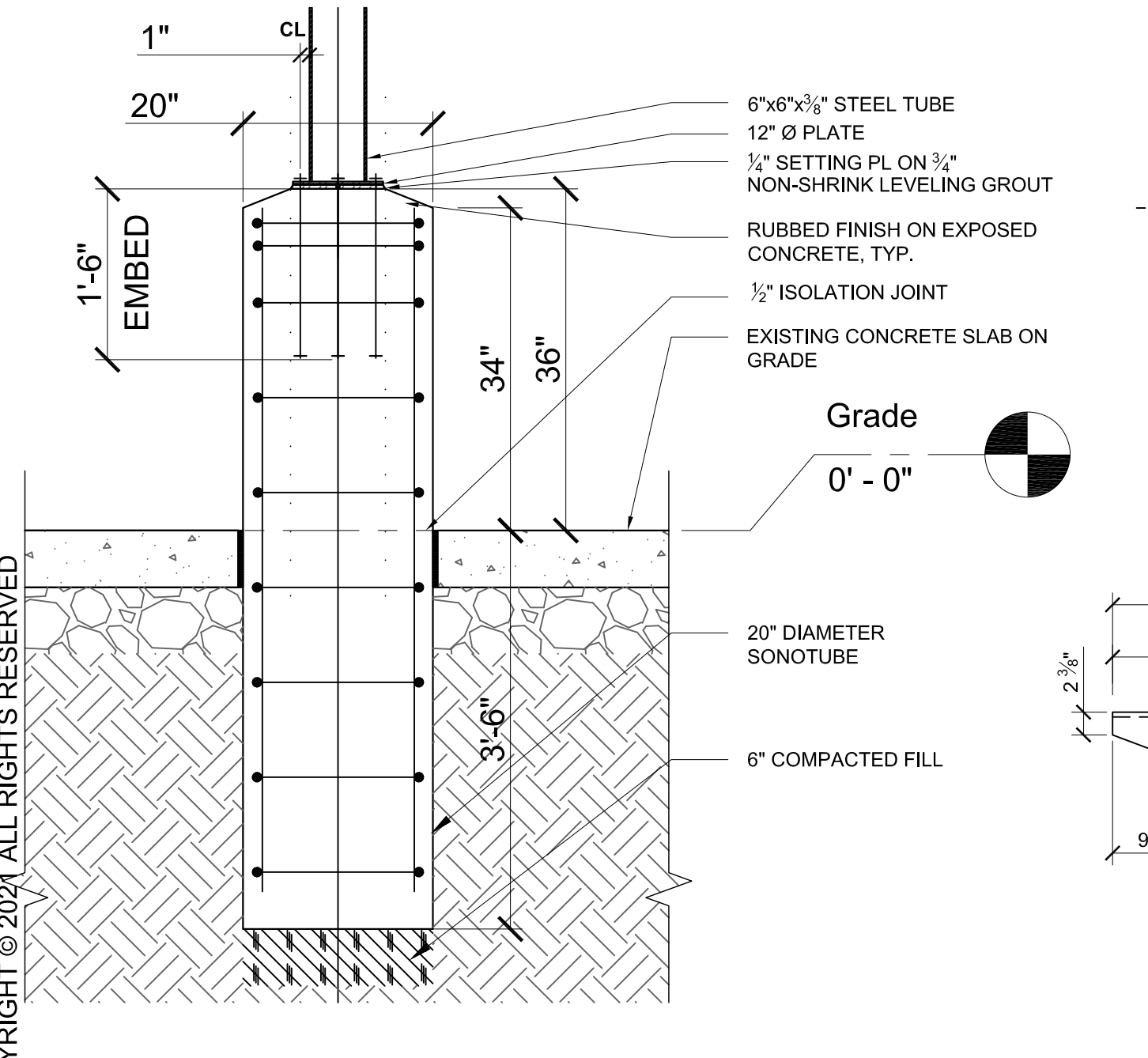
**2 NEW PERGOLA ENLARGED PLAN**  
1/4" = 1'-0"



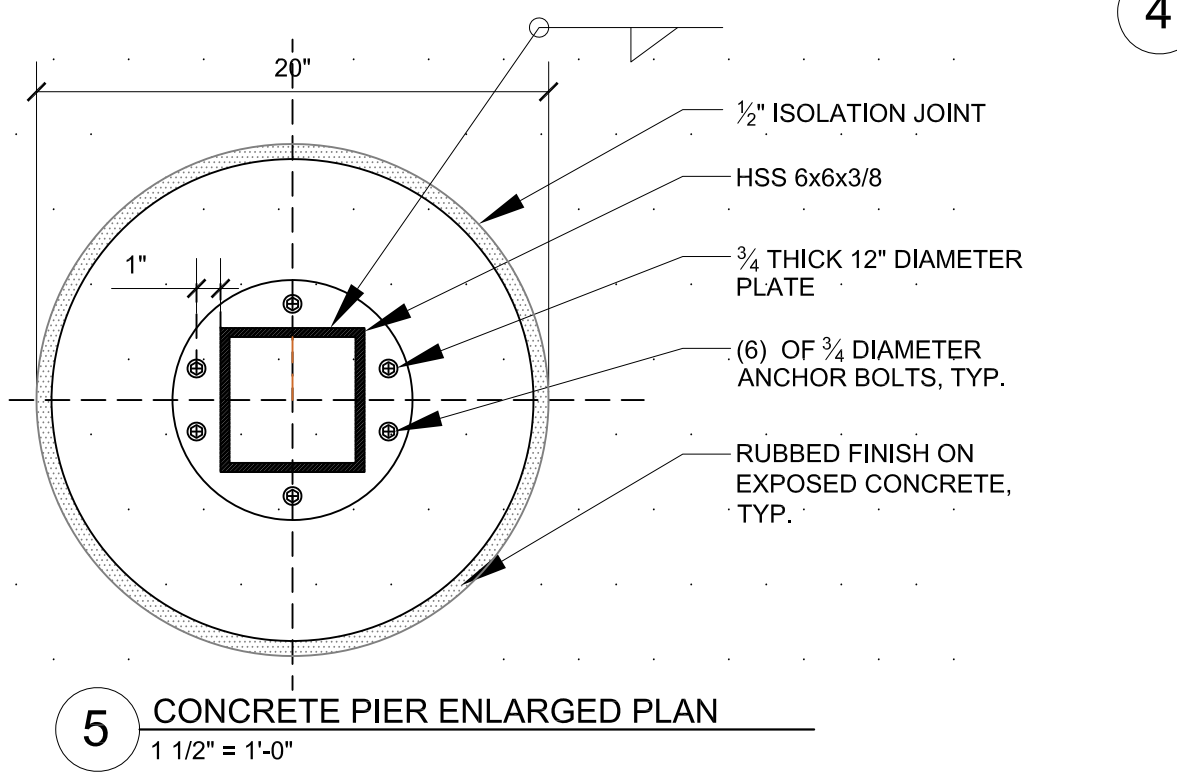
**3 NEW PERGOLA ENLARGED SECTION**  
1/4" = 1'-0"



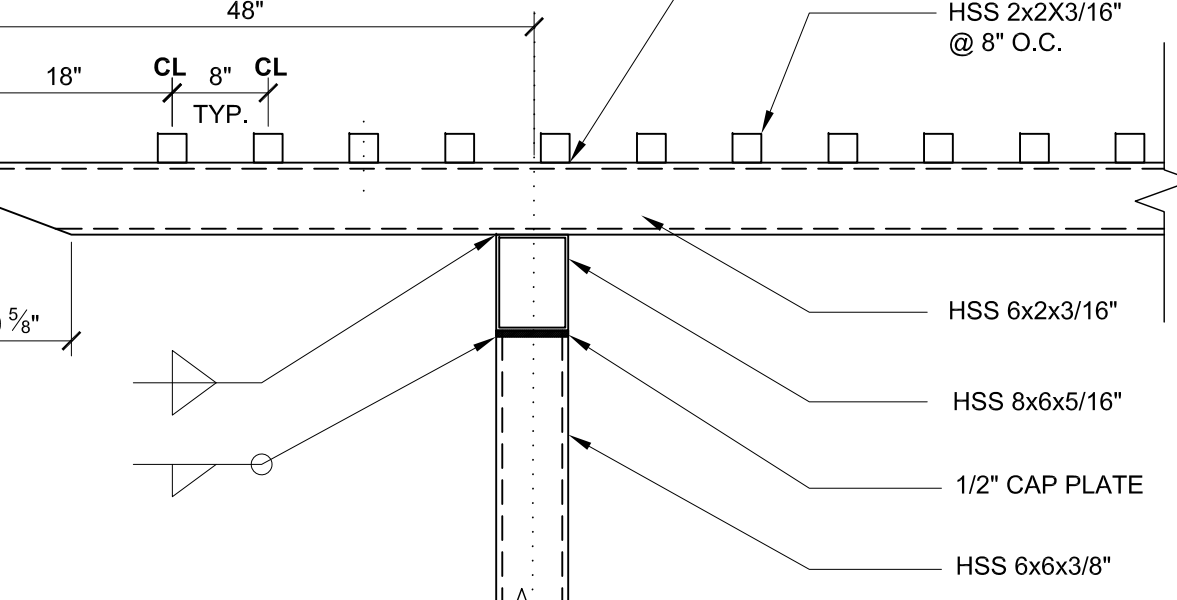
**4 NEW PERGOLA ENLARGED ELEVATION**  
1/4" = 1'-0"



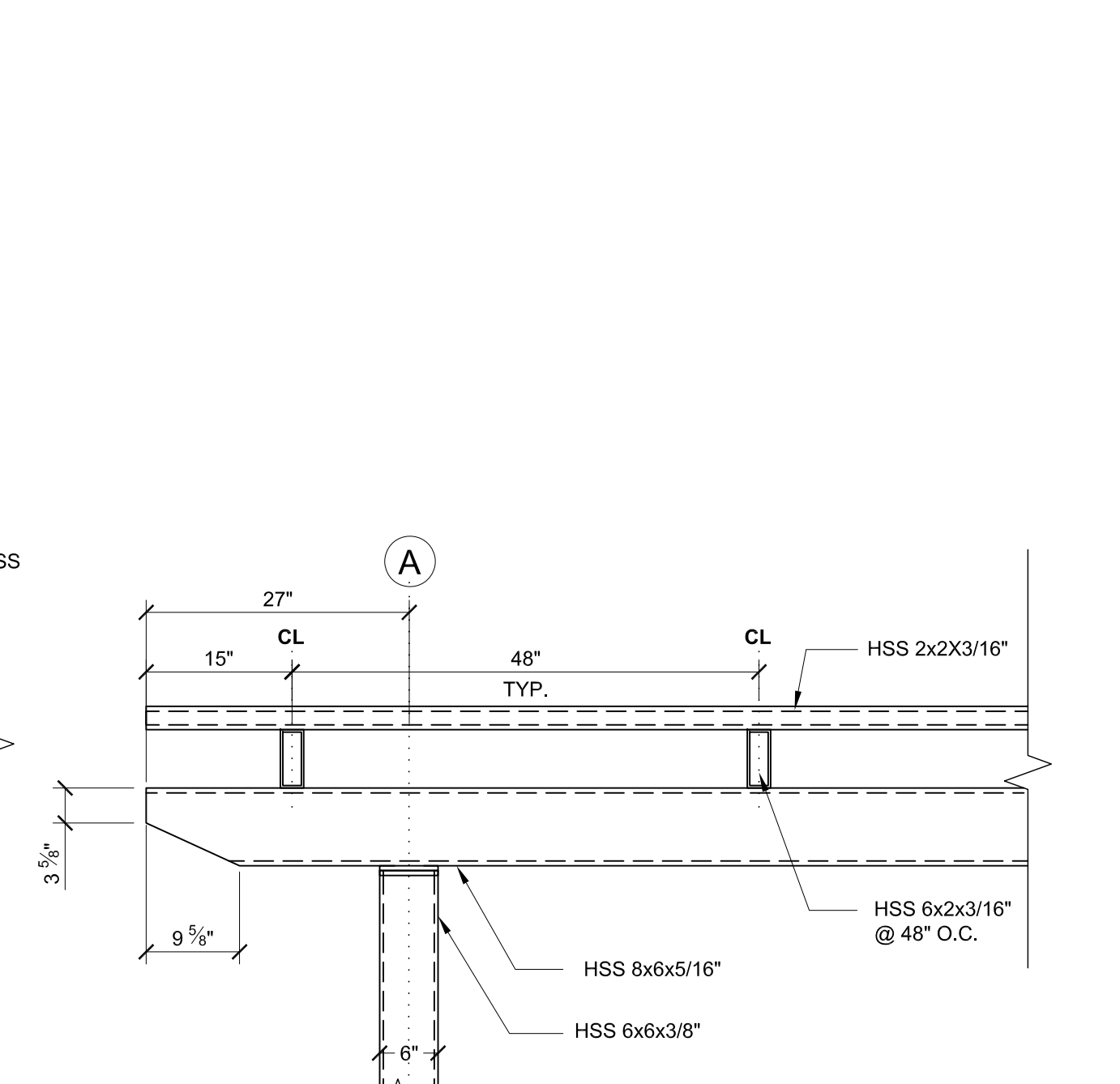
**6 NEW PERGOLA ENLARGED SECTION**  
3/4" = 1'-0"



**5 CONCRETE PIER ENLARGED PLAN**  
1 1/2" = 1'-0"



**7 NEW PERGOLA ENLARGED SECTION**  
3/4" = 1'-0"



**8 NEW PERGOLA ENLARGED SECTION**  
3/4" = 1'-0"

**GENERAL STRUCTURAL NOTES:**

ROOF LOADS	
LIVE LOAD	25 PSF
DEAD LOAD	20 PSF
ROOF SNOW LOADS	
Pg	25 PSF
Pf	23 PSF
Ce	1
Ct	12
Is	1
WIND LOADS	
BASIC WIND SPEED	115 MPH (3 SEC. GUST)
Is	10
EXPOSURE	B
INTERNAL PRESSURE COEFFICIENT	± 0.18
COMPONENT 4 CLADDING WIND LOADS (20 SQ. FT. TRIBUTARY AREA MIN.)	ROOF SLOPE ≤ 5°
ROOF ZONE 1	±23 PSF
ROOF ZONE 2	±21 PSF
ROOF ZONE 3	±21 PSF
WALL ZONE 4	±23 PSF
WALL ZONE 5	±26 PSF

- GENERAL NOTES:**
- ALL ELEVATIONS REFER TO TOP OF GRADE AT ELEVATION 0'-0".
  - ALL WORK SHALL CONFORM TO THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE.
  - SHOP DRAWINGS PREPARED BY THE SUBCONTRACTORS, SUPPLIERS, ETC. SHALL BE REVIEWED BY THE ARCHITECT FOR CONFORMANCE WITH THE DESIGN CONCEPT ONLY.
  - THE CONTRACTOR SHALL INSPECT THE SITE AND SHALL VERIFY ALL DATA PERTAINING TO THE EXISTING CONDITIONS AND TO THEIR RELATION TO THE NEW WORK. REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY.
  - THE SPECIFICATIONS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHOULD BE STUDIED BEFORE PROCEEDING WITH THE WORK.
  - NO WORK SHALL BE PERFORMED WITHOUT APPROVED SHOP DRAWINGS.
  - UNLESS NOTED OTHERWISE, ALL DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE.
  - COORDINATION OF SIZES AND LOCATIONS OF OPENINGS FOR PIPES, DUCTS, ETC. SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. NO PIPES OR SLEEVES FOR MECHANICAL OR OTHER TRADES SHALL PASS THROUGH STRUCTURAL MEMBERS WITHOUT THE ARCHITECT'S APPROVAL.
  - THE CONTRACTOR SHALL GIVE DUE CONSIDERATION TO ALL SAFETY RULES DICTATED BY CODE AND GOOD PRACTICE. TEMPORARY BRACING SHALL BE PROVIDED WHERE NECESSARY TO INSURE THE STABILITY AND SAFETY OF THE STRUCTURE DURING ERECTION AND CONSTRUCTION. DESIGN AND CONSTRUCTION OF ALL TEMPORARY BRACING, SCAFFOLDING, SHORING, ETC. SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE RESPECTIVE TRADE CONTRACTOR.
- STRUCTURAL STEEL**
- ALL STRUCTURAL STEEL SHALL BE NEW AND CONFORM TO THE FOLLOWING UNLESS NOTED OTHERWISE:
    - ROLLED SHAPES: ASTM A992 GR. 50 (50 KSI)
    - PLATES, ANGLES, CHANNELS: ASTM A36 (36 KSI)
    - ROUND HOLLOW STRUCTURAL SECTIONS (RHSS): ASTM A500 GR. B (42 KSI)
    - RECTANGULAR HSS: ASTM A500 GR. B (42 KSI)
    - ROUND PIPES: ASTM A500 GR. B (42 KSI)
    - ANCHOR RODS: ASTM F1554 GR. 55 (55 KSI WELDABLE)
    - STAINLESS STEEL: AISI 304 (30 KSI)
    - STAINLESS STEEL ANCHOR RODS: ASTM A193B8 CLASS 1 (30 KSI)
  - WELDS SHALL BE E70XX ELECTRODES AND CONFORM TO AISC D11/D12 FOR ALUMINUM AND D16 FOR STAINLESS STEEL.
  - BOLTS SHALL BE MINIMUM OF 3/4" DIA. AND CONFORM TO ASTM A325 OR A490.
  - GALVANIZING SHALL CONFORM TO ASTM A123.
  - ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE CURRENTLY APPLICABLE CODES AND AISC STANDARDS.
  - ALL STEEL SHALL BE SIZES INDICATED ON THE DRAWINGS. SUBSTITUTIONS, EVEN WITH MEMBERS OF HIGHER CAPACITIES, ARE NOT PERMITTED UNLESS APPROVED BY THE ARCHITECT AND ENGINEER.
  - STEEL CONTRACTOR TO PROVIDE ENGINEERED SHOP DRAWINGS THAT ENTAIL ERECTION PLANS, MEMBER SIZES AND MARKS, FABRICATION AND ASSEMBLY DETAILS, CONNECTIONS, ETC. GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ARCHITECT AND ENGINEER FOR REVIEW.
  - DETAILS SHOWN ON DRAWINGS ARE CONCEPTUAL ONLY. THEY DO NOT INDICATE THE REQUIRED PLATE SIZES, BOLT QUANTITIES, WELD SIZES, ETC. UNLESS NOTED OTHERWISE.
  - UNLESS THE CONNECTION DESIGN IS SPECIFICALLY INDICATED ON THE DRAWINGS, ALL SHEAR AND MOMENT CONNECTIONS SHALL BE DESIGNED BY THE STEEL CONTRACTOR UTILIZING RATIONAL ENGINEERING METHODS IN ACCORDANCE WITH THE LATEST EDITION OF AISC STEEL CONSTRUCTION MANUAL. CALCULATIONS PREPARED AND STAMPED BY A REGISTERED PROFESSIONAL IN THE STATE OF THE PROJECT LOCATION SHALL BE SUBMITTED FOR REVIEW.
  - ALL MOMENT CONNECTIONS SHALL BE DESIGNED TO DEVELOP THE FULL BENDING CAPACITY OF THE MEMBERS.
  - ALL SHEAR CONNECTIONS BETWEEN BEAMS, GIRDERS AND COLUMNS SHALL BE DESIGNED BASED ON THE GREATEST MAGNITUDE OF THE FOLLOWING OR AS DETERMINED BY THE DESIGNING PROFESSIONAL UNLESS NOTED OTHERWISE:
    - FORCES INDICATED ON PLAN (SERVICE LOADS)
    - ONE-HALF (50%) OF THE TOTAL UNIFORM LOAD FOR THE MEMBER AS TABULATED IN THE AISC MANUAL (FOR COMPOSITE BEAMS)
  - ALL WELDS SHALL BE CONTINUOUS FILLET WELDS OF MINIMUM 1/4" SIZE UNLESS NOTED OTHERWISE.
  - STRUCTURAL STEEL NOT RECEIVING FIRE PROOFING OR GALVANIZING SHALL BE PAINTED IN ACCORDANCE WITH SPECS. VERIFY WITH ARCHITECT ON FIRE PROOFING AND PAINT REQS.
  - STRUCTURAL STEEL EXPOSED TO ELEMENTS SHALL BE PAINTED OR HOT-DIP GALVANIZED.
  - ANY PAINT OR GALVANIZED COATING REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE TOUCHED UP IN FIELD WITH THE SAME TYPE AND COLOR OF COATING. TOUCH-UP GALVANIZED PAINT SHALL CONFORM TO TF-P-641.
  - SPLICING OF STEEL MEMBERS ARE NOT PERMITTED UNLESS NOTED OTHERWISE ON DRAWINGS OR APPROVED BY THE ARCHITECT AND ENGINEER.
  - CUTTING OR BURNING HOLES IN STEEL MEMBERS IN FIELD IS NOT PERMITTED UNLESS APPROVED BY THE ARCHITECT AND ENGINEER.
  - STEEL MEMBERS SHALL BE FABRICATED WITH CAMBER AS INDICATED ON DRAWINGS. ERECT MEMBERS WITH NATURAL CAMBER UP.
  - HEADED STUDS OR DEFORMED BARS ON STEEL MEMBERS SHALL BE END WELDED TO THE STEEL MEMBER.
  - STEEL FRAMING STRUCTURE IS UNSTABLE UNTIL THE LATERAL LOAD RESISTING COMPONENTS ARE IN PLACE AND CONNECTIONS ARE 100% COMPLETE. CONTRACTOR TO PROVIDE TEMPORARY SUPPORT DURING CONSTRUCTION UNTIL THE FRAMING IS STRUCTURALLY STABLE.
  - ALL NON-STRUCTURAL WALL ELEMENTS ATTACHED TO THE STEEL FRAMING SHALL PROVIDE CONNECTIONS THAT ALLOW DEFLECTION AND/OR ROTATION OF THE FRAMING MEMBERS.
  - HIGH STRENGTH NON-SHRINK LEVELING GROUT SHALL BE PROVIDED AT ALL STEEL BEARING LOCATIONS ON CONCRETE OR CMU SUCH AS BELOW COLUMN BASE PLATES, BEAM/JOIST BEARING PLATES OR LINTELS TO ENSURE A PROPER UNIFORM BEARING.
  - ASSS DENOTES ARCHITECTURALLY EXPOSED STRUCTURAL STEEL AND SHALL BE FABRICATED IN ACCORDANCE WITH SPECIFICATIONS.

**CONCRETE NOTES:**

- CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 308).
- NO WORK SHALL BEGIN WITHOUT APPROVED SHOP DRAWINGS AND MIX DESIGN.
- MATERIAL PROPERTIES**  
ALL NORMAL WEIGHT CONCRETE (145 pcf) SHALL HAVE THE FOLLOWING MATERIAL PROPERTIES AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH AS FOLLOWS:
 

	F <sub>c</sub> PSI	MAX. W/C RATIO	MAX. SLUMP INCHES	TOTAL AIR CONTENT
FOOTING/STEM	3000	0.50	4-6	N/A
DRILLED PIERS	3000	0.50	4-6	N/A
EXT. SOG.	4500	0.45	4	N/A
ALL OTHER	4000	0.45	4	1%
N.B. GROUT	8000		8	5%
WALL GROUT	3000		8	N/A

 CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE ALLOWED IN CONCRETE.  
ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE SHALL BE AIR ENTRAINED 6% TO 8% MIN.
- ALL CONCRETE SHALL BE CURED FOR A MINIMUM OF 1 DAYS PRIOR TO REMOVING FORMS. IF FORMS FOR VERTICAL SURFACES ARE REMOVED PRIOR TO THE END OF THE CURING PERIOD, SPRAY SURFACES WITH LIQUID MEMBRANE CURING COMPOUND (SEE SPECIFICATIONS).
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. PROVIDE CORNER BARS OF SAME SIZE AND SPACING AS HORIZONTAL WALL REINFORCEMENT.
- UNLESS NOTED OTHERWISE, PROVIDE LAP SPLICES OF AT LEAST 42 BAR DIAMETERS FOR ALL REINFORCEMENT. ADDITIONAL LAP SPLICES REQUIRED FOR CONSTRUCTION SHALL BE CLASS B UNO.
- UNLESS NOTED OTHERWISE, PROVIDE THE FOLLOWING MINIMUM CLEAR CONCRETE COVER FOR REINFORCING BARS:  
CONCRETE EXPOSED TO EARTH OR WEATHER:  
SURFACES NOT FORMED: 3"  
BOTTOM OF FOOTINGS: 3"  
SURFACES FORMED: 1"  
ALL OTHER SURFACES: 2"  
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:  
SLABS (BOTTOM): 3/4"  
SLABS (TOP): 1"  
WALLS (INTERIOR SURFACE): 1"  
ALL OTHER SURFACES: 1 1/2"
- REBAR SHOP DRAWINGS SHALL INCLUDE PLANS SHOWING ALL ACCESSORY BARS, ETC. FOR SUPPORT OF TOP AND BOTTOM REINFORCING. SPACE CHAIRS AT 4'-0" MAXIMUM; SUPPORT BARS MUST BE MINIMUM #5.
- ALL FIELD BENDING OF REINFORCING SHALL BE DONE COLD. HEATING OF BARS IN THE FIELD IS NOT PERMITTED.
- NO ALUMINUM OF ANY TYPE SHALL BE ALLOWED IN THE CONCRETE WORK UNLESS COATED TO PREVENT ALUMINUM/CONCRETE REACTION. MAXIMUM OD. OF EMBEDDED CONDUIT SHALL BE NO LARGER THAN ONE-THIRD OF THE SLAB THICKNESS.
- NO ELECTRICAL CONDUIT SHALL BE PLACED IN SLABS-ON-GRADE.
- REFER TO ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, SLAB DEPRESSIONS AND ANY OTHER ITEMS RELATED TO CONCRETE WORK. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THEIR PROPER LOCATION.
- FIBERESH IN CONCRETE SLAB-ON-GRADE TO BE ADDED TO 4000 PSI CONCRETE AT A RATE OF 20 LB/YD<sup>3</sup>. GENERAL CONTRACTOR TO SUBMIT FIBERESH MANUFACTURER INFORMATION TO ARCHITECT FOR APPROVAL PRIOR TO PLACEMENT OF SLABS.

**FOUNDATION NOTES:**

- FOOTINGS SHALL BEAR ON UNDISTURBED SOIL WHEREVER POSSIBLE. DESIGN SOIL BEARING PRESSURES ARE ASSUMED TO BE 9000 PSF UNTIL A SOIL REPORT IS PROVIDED.
- ALL FOUNDATION AND SLAB EXCAVATIONS SHALL BE INSPECTED AND VERIFIED BY A GEOTECHNICAL ENGINEER.
- FOOTINGS SHALL BEAR AT THE ELEVATIONS SHOWN. IF OVER-EXCAVATION OCCURS, OR THE EXISTING SITE IS BELOW THE INDICATED BEARING ELEVATIONS, PLACE AND COMPACT ENGINEERED FILL PER GEO-TECHNICAL ENGINEER REQS.
- A MINIMUM FROST COVER OF 3'-6" SHALL BE MAINTAINED FOR ALL EXTERIOR FOOTINGS.
- FILL AND/OR BACKFILL SHALL BE COMPACTED TO THE FOLLOWING MINIMUM PERCENTAGES OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557:  
FILL UNDER FOOTINGS: 95%  
FILL UNDER BUILDING SLAB-ON-GRADE: 95%  
\*AVOID COMPACTING COHESIVE SOILS AT MOISTURE CONTENTS ON THE WET SIDE OF OPTIMUM.
- NO FOOTINGS SHALL BE PLACED ONTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, OR ICE.
- A VAPOR BARRIER SHALL BE PROVIDED UNDER ALL INTERIOR SLABS-ON-GRADE PER SPECIFICATIONS.

**REINFORCING STEEL REBAR**

- REINFORCING STEEL SHALL BE DEFORMED #3 THROUGH #8 REBAR CONFORMING TO ASTM A615 GR. 60.
- ELECTRICALLY WELDED WIRE FABRIC (WUF) SHALL CONFORM TO ASTM A185 AND A1064. STRUCTURAL FIBERS MAY BE ADDED TO OR REPLACE WUF WITH APPROVAL FROM THE ENGINEER.
- WUF SHALL OVERLAP 2 FULL MESH PANELS AND MECHANICALLY TIED IN AREAS WHERE LAPPING IS REQUIRED.
- DETAILING OF ALL REINFORCING STEEL REBAR AND ACCESSORIES SHALL CONFORM TO ACI 318.
- CONTRACTOR TO PROVIDE ENGINEERED SHOP DRAWINGS THAT ENTAIL THE LOCATIONS OF ALL CONCRETE CONSTRUCTION JOINTS, CURBS, FADS, SLAB DEPRESSIONS, SLEEVES, ETC. WITH CORRESPONDING REINFORCING STEEL REBAR SIZES, SPACING, DETAILS, ETC. GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO ARCHITECT AND ENGINEER FOR REVIEW.
- DOUELS SHALL MATCH THE SIZE, SPACING AND QUANTITY OF THE MAIN REINFORCING STEEL REBAR UNLESS NOTED OTHERWISE.
- ALL REBAR (INCLUDING TOP, BOTTOM AND SIDES IN SLABS AND BEAMS) EXPOSED TO ELEMENTS SUCH AS PRECIPITATION, DE-ICING SALT, PLANTING SOIL OR AS NOTED ON DRAWINGS SHALL BE EPOXY COATED CONFORMING TO ASTM A118.
- WELDING OF REBAR IS NOT PERMITTED UNLESS SPECIFICALLY INDICATED ON DRAWINGS. REBAR WELDING SHALL CONFORM TO ASTM A106 AND A106 D14.
- REBAR SPLICES SHALL CONFORM TO ACI 318. SPLICE REBAR ONLY AS INDICATED ON DRAWINGS EXCEPT FOR REBAR NOTED AS CONTINUOUS. CONTINUOUS REBAR SHALL BE SPLICED WITH CLASS A LAP SPLICE AT SUPPORT FOR BOTTOM REBAR AND AT MID-SPAN FOR TOP AND SIDE REBAR.

Chicago  
1700 North LaSalle Street  
Tel: 312.643.7000  
Fax: 312.643.7001  
www.cordoganark.com

**CORDOGAN, CLARK & ASSOCIATES, INC.**  
: ARCHITECTS • ENGINEERS •

**VILLAGE OF SCHAUMBURG**  
101 Schaumburg Ct  
Schaumburg, IL 60193

**ENLARGED PERGOLA PLAN & ELEVATIONS**

JOB NUMBER: 21311  
DATE: 09.24.2021

REVISIONS: PERMIT SET

**A2.2**

09/23/2021 7:10:50 PM  
COPYRIGHT © 2021 ALL RIGHTS RESERVED

STATE OF ILLINOIS  
LICENSED ARCHITECT  
JOHN W. CLARK  
NO. 04110515