GENERAL NOTES

1. STRUCTURAL DRAWINGS ARE TO BE COORDINATED AND USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.

2. TYLK GUSTAFSON RECKERS WILSON ANDREWS, LLC. SHALL NOT BE RESPONSIBLE FOR, NOR HAVE CONTROL OR CHARGE OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS PROJECT, AND SHALL NOT BE RESPONSIBLE FOR ANY CONTRACTORS' FAILURE TO CARRY OUT HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

3. TYLK GUSTAFSON RECKERS WILSON ANDREWS, LLC. SHALL NOT BE RESPONSIBLE FOR, NOR HAVE CONTROL OVER, THE ACTS OR OMISSIONS OF THE GENERAL CONTRACTOR, ANY SUBCONTRACTORS, ANY OF THEIR AGENTS, OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

4. THE GENERAL CONTRACTOR, FOUNDATION SUBCONTRACTOR, AND STEEL ERECTION SUBCONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT. ALL SHORING AND BRACING MEMBERS AND CONNECTIONS SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT THE IMPOSED LOADS. TEMPORARY MEMBERS AND CONNECTIONS SHALL NOT BE REMOVED UNTIL PERMANENT MEMBERS ARE IN PLACE AND FINAL CONNECTIONS ARE MADE.

5. THE GENERAL CONTRACTOR SHALL PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO PREVENT DAMAGE AND SETTLEMENT OF EXISTING OR NEW CONSTRUCTION INSIDE OR OUTSIDE THE PROJECT LIMITS DURING EXCAVATION AND FOUNDATION CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING CONSTRUCTION INSIDE OR OUTSIDE OF THE PROJECT LIMITS, CAUSED BY CONSTRUCTION TECHNIQUES IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

6. NO FIELD MODIFICATIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO REVISIONS DUE TO MISLOCATION, MISFIT, OR ANY OTHER CONSTRUCTION ERRORS.

7. NO OPENING SHALL BE PLACED IN ANY STRUCTURAL MEMBER (OTHER THAN AS INDICATED ON APPROVED SHOP DRAWINGS) UNTIL THE LOCATION HAS BEEN APPROVED BY THE STRUCTURAL ENGINEER.

8. ALL DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE NOTED.

9. MATERIALS AND EQUIPMENT SHALL BE STORED AND TRANSPORTED IN A MANNER SO AS NOT TO EXCEED THE ALLOWABLE CAPACITY OF THE CONSTRUCTED MEMBER.

GENERAL CONTRACTOR VERIFICATION SUBMITTALS:

1. THE GENERAL CONTRACTOR SHALL SUBMIT TO THE STRUCTURAL ENGINEER, OWNER, AND SS, LLC. THE BELOW INDICATED VERIFICATION SUBMITTALS FOR REVIEW AND APPROVAL:

   A. AS-BUILT SURVEY DRAWING OF THE CONSTRUCTED CONCRETE PIERS INDICATING THE FOLLOWING:

      I. DIMENSIONED LOCATION IN PLAN OF ALL PIERS INCLUDING ANY ADJUSTMENTS MADE TO THEM RELATIVE TO THE FOUNDATION PLAN.

      II. ELEVATION OF THE TOP OF ALL PIERS AND THE SURFACE GRADE ADJACENT TO THE PIERS.

      III. CONFIRMATION OF ACCURATE PLACEMENT OF THE COLUMN BASE ANCHOR RODS INCLUDING ANY ANCHOR RODS THAT ARE PLACED OUT OF TOLERANCE.

   B. STRUCTURAL STEEL CANOPY STRUCTURES ARE BASED ON THE USE OF THE QPEAK DUO XL-G11 SERIES SOLAR PANEL SYSTEM MANUFACTURED BY Q CELLS. THE GENERAL CONTRACTOR SHALL SUBMIT WRITTEN VERIFICATION OF THE USE OF THIS MODULE SYSTEM.

SHOP DRAWINGS

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE STRUCTURAL DRAWINGS ENGINEER FOR REVIEW AND APPROVAL.

2. ALL SHOP DRAWING SUBMITTALS SHALL BE AS DESCRIBED IN THE PROJECT SPECIFICATIONS OR IN THESE NOTES IF THERE IS NO PROJECT SPECIFICATION.

3. SHOP DRAWINGS AND RELATED MATERIALS PREPARED BY SUPPLIERS AND SUBCONTRACTORS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE ARCHITECT/STRUCTURAL ENGINEER. THE GENERAL CONTRACTOR SHALL REVIEW ALL SUBMISSIONS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION, TECHNICAL CONTENT, COORDINATION OF TRADES, DIMENSIONAL ACCURACY, SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL APPROVE AND SO STAMP EACH SUBMISSION BEFORE TO THE ARCHITECT/STRUCTURAL ENGINEER.

4. THE STRUCTURAL DRAWINGS SHALL NOT BE USED AS THE BACKGROUNDS FOR THE PRODUCTION OF ANY SHOP DRAWINGS THAT ARE SUBMITTED FOR APPROVAL.

5. ANY DEVIATIONS FROM THE STRUCTURAL DRAWINGS OR SPECIFICATIONS SHALL BE NOTED AND BUBBLED ON THE SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW.

6. FOR SHOP DRAWINGS TO BE RESUBMITTED TO THE STRUCTURAL ENGINEER FOR A SUBSEQUENT REVIEW, ALL CHANGES BE NOTED AND BUBBLED.

STRUCTURAL SYSTEM

1. THE GRAVITY LOADS RESISTING SYSTEM CONSISTS OF CANTILEVERED STEEL COLUMNS, SUPPORTING STEEL BEAMS, SUPPORTING STEEL PURLINS.

2. THE LATERAL LOAD RESISTING SYSTEM CONSISTS OF STEEL CANTILEVERED COLUMNS.

FOUNDATIONS

1. FOUNDATION DESIGN IS BASED ON ASSUMED SOIL PROPERTIES, WHICH SHALL BE VERIFIED IN FIELD.

2. FOUNDATION STRUCTURE IS BASED ON THE USE OF A SPREAD FOOTING APPLYING A MAXIMUM PRESSURE OF 1,500 POUNDS PER SQUARE FOOT TO THE SOIL.

3. ALL SOIL PROPERTIES SHALL BE VERIFIED BY FIELD TESTING BY A LICENSED GEOTECHNICAL ENGINEER. IF FIELD CONDITIONS DO NOT PROVIDE THESE MINIMUM VALUES, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

4. THE ASSUMED LATERAL SOIL PROPERTIES ARE AS FOLLOWS:

   A. MOIST UNIT WEIGHT = 115 PCF
   B. FRICTION ANGLE = 28 DEGREES
   C. THE LATERAL RESISTANCE OF THE UPPER 24 INCHES OF SOIL HAS BEEN NEGLECTED.

5. THE CONCRETE FOR EACH FOOTING SHALL BE PLACED IN ONE (1) CONTINUOUS PLACEMENT.

6. THE BOTTOM OF EACH FOOTING SHALL BE PLACED A MINIMUM OF 42" BELOW GRADE FOR UNHEATED STRUCTURES NOT ADJACENT TO HEATED STRUCTURES.

7. SHOULD UNSUITABLE BEARING CONDITIONS BE ENCOUNTERED DURING EXCAVATION, THE GENERAL CONTRACTOR SHALL NOTIFY THE OWNER, STRUCTURAL ENGINEER, AND SS, LLC. BEFORE CONTINUING WITH CONSTRUCTION.

8. THE GENERAL CONTRACTOR MUST PROVIDE SURFACE DRAINAGE AND PUMPS TO PROTECT ALL EXCAVATION FROM FLOODING. FLOODING OF ANY EXCAVATION AFTER APPROVAL OF THE SUBGRADE WILL BE CAUSE FOR COMPLETE RE-PREPARATION AND RE-APPROVAL OF THE SUBGRADE.

9. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST OR ICE FROM PENETRATING ANY SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE AND UNTIL SUCH SUBGRADES ARE FULLY PROTECTED BY THE PERMANENT STRUCTURE.

10. RECORDS OF ANY EXISTING SUBGRADE INTERFERENCES OTHER THAN THOSE INTERFERENCES SHOWN OR INDICATED ON THE CONSTRUCTION DOCUMENTS, ARE NOT CURRENTLY AVAILABLE. DURING EXCAVATION WORK, INTERFERENCES MAY BE DISCOVERED. GENERAL CONTRACTOR SHALL DOCUMENT CONSTRUCTION-RELATED DIMENSIONS OF ALL INTERFERENCES. GENERAL CONTRACTOR TO FURNISH THE ABOVE INFORMATION IN THE FORM OF DETAILED SKETCHES TO THE OWNER, STRUCTURAL ENGINEER, AND SS, LLC. FOR REVIEW.

11. THE GENERAL CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS AND THE GEOTECHNICAL EXPLORATION REPORT AND ESTABLISH SPECIFIC CONSTRUCTION PROCEDURES AND SEQUENCES FOR THE INSTALLATION OF THE DRILLED PIERS. BEFORE PROCEEDING THESE SHALL BE SUBMITTED FOR REVIEW BY THE OWNER'S SOIL TESTING LABORATORY. THE GENERAL CONTRACTOR'S PROCEDURES AND METHODS OF DRILLED PIER INSTALLATION SHALL PREVENT SETTLEMENT OF ADJACENT CONSTRUCTION, AND THE GENERAL CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ALL REMEDIAL WORK RESULTING FROM SUCH SETTLEMENT.

12. REFER TO THE TESTING AND INSPECTION SECTION OF THESE NOTES FOR THE FOUNDATION TESTING AND INSPECTION REQUIREMENTS.

STRUCTURAL CONCRETE

1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LISTED AMERICAN CONCRETE INSTITUTE PUBLICATIONS:

   A. ACI 301 – "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
   B. ACI 302 – "RECOMMENDED PRACTICE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION"
   C. ACI 304 – "ACI MANUAL OF CONCRETE INSPECTION"
   D. ACI 311 – "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE"
   E. ACI 315 – "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
   F. ACI 318-14 – "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
   G. ACI 347 – "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"

2. PROVIDE CONCRETE TO OBTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

   A. FOUNDATIONS.....f'c = 4,000 PSI

3. FOUNDATIONS SHALL HAVE A WATER/CEMENT RATIO LESS THAN OR EQUAL TO 0.45.

4. LABORATORY TEST REPORTS OR MATERIAL CERTIFICATES FOR CONCRETE MATERIALS AND MIX DESIGN TEST DATA, IN CONFORMANCE WITH ACI STANDARDS, SHALL BE SUBMITTED FOR REVIEW BY THE GENERAL CONTRACTOR FOR EACH TYPE OF CONCRETE TO BE USED. EACH SUBMITTED MIX DESIGN SHALL IDENTIFY THE APPLICATION FOR WHICH THE MIX WILL BE USED.

5. ALL CONCRETE SHALL BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.

6. ALL CONCRETE ELEMENTS SUBJECT TO FREEZING AND THAWING DURING CONSTRUCTION OR OVER THE SERVICE LIFE OF THE STRUCTURE SHALL BE AIR-ENTRAINED WITH A TOTAL AIR CONTENT OF 5.5% +/- 1.5%, AS SPECIFIED IN ACI-318, PARTS 3 AND 4 (TABLE 4.2.1).

7. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

8. THE GENERAL CONTRACTOR SHALL SUBMIT CHECKED, DETAILED REINFORCEMENT SHOP DRAWINGS SHOWING THE LOCATIONS AND DETAILING OF ALL DRILLED PIER REINFORCEMENT PRIOR TO FABRICATION. DETAILS SHALL INCLUDE STEEL SIZES, LAPS, SPACING AND PLACEMENT.

9. THE MINIMUM CONCRETE COVER FOR CAST-IN-PLACE (NON-PRESTRESSED) CONCRETE SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"

   B. CONCRETE EXPOSED TO EARTH OR WEATHER.....2"

10. PROVIDE ADEQUATE BOLSTERS, HI-CHAIRS, SUPPORT BARS, ETC., TO MAINTAIN SPECIFIED CLEARANCES FOR THE ENTIRE LENGTH OF ALL REINFORCING BARS.

11. PROVIDE PLASTIC TIPPED ACCESSORIES FOR REINFORCEMENT AT ALL FACES OF EXPOSED CONCRETE, INTERIOR OR EXTERIOR.

12. ALL FIELD BENDING OF REINFORCEMENT SHALL BE DONE COLD. HEATING OF BARS WILL NOT BE PERMITTED.

13. NO ALUMINUM OF ANY TYPE SHALL BE ALLOWED IN THE CONCRETE WORK, UNLESS COATED TO PREVENT ALUMINUM CONCRETE REACTION.

14. ALL REINFORCING STEEL SHALL BE HIGH STRENGTH NEW BILLET STEEL, CONFORMING TO ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.

15. DETAILING AND ACCESSORIES SHALL CONFORM TO THE ACI DETAILING MANUAL AND TO THE CRSI MANUAL OF STANDARD PRACTICE. CURRENT EDITIONS, UNLESS OTHERWISE NOTED BELOW, ON THE DRAWINGS, OR IN THE SPECIFICATIONS.

16. REFER TO THE TESTING AND INSPECTION SECTION OF THESE NOTES FOR THE CONCRETE TESTING AND INSPECTION REQUIREMENTS.

NON-SHRINK GROUT

1. GROUT PLACED BETWEEN THE COLUMN BASE PLATE AND THE FOUNDATION SHALL BE IN ACCORDANCE WITH ASTM C 1107, FACTORY-PACKAGED, NONMETALLIC AGGREGATE GROUT, NONCORROSIVE AND NONSTAINING, MIXED WITH WATER TO CONSISTENCY SUITABLE FOR APPLICATION AND A 30-MINUTE WORKING TIME.

2. THE GENERAL CONTRACTOR SHALL SUBMIT TO THE STRUCTURAL ENGINEER, FOR REVIEW, A PRODUCT DATA SUBMITTAL FOR THE NON-SHRINK GROUT.

STRUCTURAL STEEL

1. FURNISH STRUCTURAL STEEL IN ACCORDANCE WITH AISC (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) 341-10 AND AISC 360-10 SPECIFICATIONS FOR THE DESIGN (ASD), FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND AISC CODE OF STANDARD PRACTICE.

2. STRUCTURAL STEEL SHALL BE AS INDICATED BELOW U.N.O.:

STRUCTURAL SHAPE/MATERIAL	ASTM SPECIFICATION
W-SHAPE	A992
ANGLES	A36
SQUARE & RECTANGULAR HSS	A500, GRADE B
PLATE MATERIAL	A36
BASE PLATE	A36
ANCHOR BOLT ASSEMBLIES	F1554, GRADE 36
HIGH STRENGTH BOLTS	A325
COMMON STRUCTURAL BOLTS	A307

3. ALL STRUCTURAL STEEL FRAMEWORK INCLUDED IN THESE DOCUMENTS ARE CLASSIFIED AS NON-SELF-SUPPORTING. ALL CONNECTIONS SPECIFIED HEREIN ARE BASED ON LOADING CONDITIONS OF THE FULLY COMPLETED STRUCTURE IN ITS ENTIRETY INCLUDING THE FUNCTIONS OF THE COLUMN BASE PLATES AND ANCHOR BOLTS. INSTABILITIES CAN BE EXPECTED DURING THE ERECTION PROCESS DUE TO LACK OF THE STRUCTURE BEING FULLY COMPLETED. THE STEEL ERECTION SUBCONTRACTOR SHALL IDENTIFY THE SEQUENCE AND SCHEDULING OF CONSTRUCTION ITEMS AND COORDINATE THE ACTIVITIES OF ALL TRADES.

4. SS, LLC. SHALL SUBMIT TO THE STRUCTURAL ENGINEER, FOR REVIEW, ENGINEERED AND CHECKED DRAWINGS SHOWING FABRICATION DETAILS, FIELD ASSEMBLY DETAILS FOR ALL STRUCTURAL STEEL ELEMENTS.

5. ALL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER UP. PROVIDE FABRICATED CAMBERS AS INDICATED ON THE DRAWINGS.

6. AFTER FABRICATION, ALL STEEL SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE, AND OTHER FOREIGN MATERIALS.

7. WELDING SHALL BE PERFORMED WITH E70XX LOW HYDROGEN ELECTRODES OR GMAW PROCESS AWS A5.18 ER70F-6. ALL WELDING SHALL BE PERFORMED BY CERTIFIED/QUALIFIED WELDERS AND SHALL CONFORM TO THE AWS D1.1," STRUCTURAL WELDING CODE-STEEL," LATEST EDITION.

8. MINIMUM FILLET WELD SIZE SHALL COMPLY WITH THE AISC SPECIFICATION REQUIREMENTS, BUT SHALL NOT BE LESS THAN 3/16 INCH UNLESS NOTED OTHERWISE.

9. ALL BOLTS, NUTS, AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF "AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," LATEST EDITION, UNLESS NOTED OTHERWISE TO CONFORM TO THE REQUIREMENTS OF SAE SPECIFICATIONS FOR GRADE 5 BOLTS.

10. ALL STEEL CONNECTIONS SHALL BE SIMPLE SHEAR CONNECTIONS UTILIZING BOLTS IN BEARING-TYPE CONNECTIONS. BOLTS ARE TO BE TIGHTENED TO THE SNUG TIGHT CONDITION UNLESS NOTED OTHERWISE.

11. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

12. STEEL WORK TO SLOPE IN ACCORDANCE WITH ELEVATIONS GIVEN ON STRUCTURAL DRAWINGS.

13. COATING SYSTEM FOR "EXPOSED TO OUTSIDE ATMOSPHERE" STRUCTURAL STEEL COMPONENTS:

   A. AFTER THE STRUCTURAL STEEL COMPONENTS ARE FABRICATED, THEY SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.

14. ALL BOLTS SHALL BE HOT DIP GALVANIZED.

15. REFER TO THE TESTING AND INSPECTION SECTION OF THESE NOTES FOR THE STRUCTURAL STEEL TESTING AND INSPECTION REQUIREMENTS.

COLD FORMED STEEL FRAMING

1. FURNISH COLD FORMED STEEL FRAMING IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE, "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS," LATEST EDITION.

2. COLD FORMED STEEL FRAMING EXAMPLE MEMBER DESIGNATION IS AS SUCH:

   A. 600S200-54:
   A.1. 600 = 6" WEB DEPTH
   A.2. S = STUD SECTION
   A.3. 200 = 2" FLANGE WIDTH
   A.4. 54 = 54 MILS = 16 GAUGE

3. ALL FRAMING SHALL BE FORMED FROM SHEET STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM A1003, STRUCTURAL GRADE, TYPE H WITH MINIMUM G90 ZINC COATING AND MINIMUM YIELD STRENGTH OF 50 KSI, UNLESS NOTED OTHERWISE.

4. ALL FRAMING SHALL BE MINIMUM 54 MILS, UNLESS NOTED OTHERWISE.

5. ALL STUD SECTIONS SHALL BE PUNCHED WITH STANDARD HOLES WITH STIFFENED FLANGES. ALL TRACK SECTIONS SHALL BE UNPUNCHED WITH UNSTIFFENED FLANGES.

6. FASTENING OF COMPONENTS SHALL BE WITH SELF DRILLING SCREWS OR WELDING. SCREWS AND WELDING SHALL BE SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. WIRE TYING OF COMPONENTS SHALL NOT BE PERMITTED. ALL WELDS SHALL BE TOUCHED-UP WITH A ZINC RICH PAINT MEETING ASTM A780.

7. ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS AND SHALL CONFORM TO THE AWS D1.3, "STRUCTURAL WELDING CODE – SHEET STEEL," LATEST EDITION.

8. CONNECTIONS OF ALL COLD FORMED STEEL FRAMING TO COLD FORMED STEEL FRAMING SHALL BE WITH MINIMUM OF (2) #10 SELF TAPPING SHEET METAL SCREWS WITH LOW PROFILE HEAD, UNLESS NOTED OTHERWISE.

9. CONNECTIONS OF ALL COLD FORMED STEEL FRAMING TO STRUCTURAL STEEL FRAMING SHALL BE WITH MINIMUM OF (2) 0.145"Ø POWDER-ACTUATED FASTENING PINS, UNLESS NOTED OTHERWISE.

10. CONTRACTOR SHALL SUBMIT COLD FORMED STEEL FRAMING SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION. SHOP DRAWINGS SHALL SHOW LAYOUT, SPACING, SIZES, THICKNESS, AND TYPES OF COLD FORMED STEEL FRAMING, FASTENING AND ANCHORAGE DETAILS, REINFORCING CHANNELS, OPENING FRAMING, SUPPLEMENTAL FRAMING, STRAPPING, BRACING, BRIDGING, SPLICES, AND ACCESSORIES. PROVIDE ADDITIONAL INFORMATION WITH SHOP DRAWING SUBMITTAL AS INDICATED IN PROJECT SPECIFICATIONS.

11. REFER TO THE TESTING AND INSPECTION SECTION OF THESE NOTES FOR THE COLD FORMED STEEL FRAMING TESTING AND INSPECTION REQUIREMENTS.

STRUCTURAL LOADING

1. STRUCTURAL BUILDING CODE – 2018 INTERNATIONAL BUILDING CODE

2. DEAD LOADS: SOLAR PANELS = 2.5 PSF
   MISC. WIRING AND CONNECTOR = 1.0 PSF
   STRUCTURE = SELF WEIGHT OF STRUCTURAL MEMBERS

3. SNOW LOADS:
   A. GROUND SNOW LOAD – Pg = 25 PSF
   B. SNOW EXPOSURE FACTOR – Ce = 0.9
   C. SNOW LOAD IMPORTANCE FACTOR – I = 1.00
   D. THERMAL FACTOR – Ct = 1.2
   E. ROOF SNOW LOAD – Pf = 20 PSF

4. WIND LOADS
   A. BASIC WIND SPEED (3 SECOND GUST) – V = 115 MPH
   B. IMPORTANCE FACTOR – I = 1.00
   C. BUILDING CATEGORY = II
   D. EXPOSURE CATEGORY = B
   E. INTERNAL PRESSURE COEFFICIENT = N/A
   F. PRIMARY STRUCTURAL SYSTEM OF OPEN BUILDING WITH MONOSLOPE ROOF:

      b. PARALLEL TO PURLIN SPAN DIRECTION (REFERENCE ASCE7-10 FIGURE 27.4-7):
         i. VERTICAL FACE OF STRUCTURE MEMBERS = 32.6 PSF
         ii. VERTICAL PRESSURE OVER ENTIRE ROOF LOCATED 0-H FROM WINDWARD EDGE = +/-13.7 PSF
         iii. VERTICAL PRESSURE OVER ENTIRE ROOF LOCATED H-2H FROM WINDWARD EDGE = +/-10.3 PSF
         iii. VERTICAL PRESSURE OVER ENTIRE ROOF LOCATED >2H FROM WINDWARD EDGE = +/-5.1 PSF

      a. PERPENDICULAR TO PURLIN SPAN DIRECTION (REFERENCE ASCE7-10 FIGURE 27.4-4):
         i. VERTICAL PRESSURE AT WINDWARD HALF OF ROOF CASE A (GAMMA = 0) = 23.7 PSF
         ii. VERTICAL PRESSURE AT LEEWARD HALF OF ROOF CASE A (GAMMA = 0) = 8.3 PSF
         iii. VERTICAL PRESSURE AT WINDWARD HALF OF ROOF CASE B (GAMMA = 0) = -24.6 PSF (UPLIFT)
         iv. VERTICAL PRESSURE AT LEEWARD HALF OF ROOF CASE B (GAMMA = 0) = -7.4 PSF (UPLIFT)
         v. VERTICAL PRESSURE AT WINDWARD HALF OF ROOF CASE A (GAMMA = 180) = 23.7PSF
         vi. VERTICAL PRESSURE AT LEEWARD HALF OF ROOF CASE A (GAMMA = 180) = 8.3 PSF
         vii. VERTICAL PRESSURE AT WINDWARD HALF OF ROOF CASE B (GAMMA = 180) = -24.6 PSF (UPLIFT)
         viii. VERTICAL PRESSURE AT LEEWARD HALF OF ROOF CASE B (GAMMA = 180) = -7.4 PSF (UPLIFT)

   G. COMPONENTS AND CLADDING WIND PRESSURE = SEE REFERENCED CODE

5. SEISMIC LOADS:
   A. OCCUPANCY CATEGORY = II
   B. SEISMIC IMPORTANCE FACTOR = 1.0
   C. SITE CLASS = D (PER GEOTECHNICAL REPORT)
   D. ANALYSIS PROCEDURE USED = EQUIVALENT LATERAL FORCE
   E. BASIC SEISMIC FORCE RESISTING SYSTEM = STEEL ORDINARY CANTILEVER COLUMN SYSTEM
   F. RESPONSE MODIFICATION COEFFICIENT – R = 1.25
   G. SHORT PERIOD MAPPED SPECTRAL ACCELERATION – Ss = 0.136
   H. 1-SECOND PERIOD MAPPED SPECTRAL ACCELERATION – S1 = 0.044
   I. SHORT PERIOD SITE COEFFICIENT – Fa = 1.6
   J. 1-SECOND PERIOD SITE COEFFICIENT – Fv = 2.4
   K. SHORT PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION – SDS = 0.145
   L. 1-SECOND PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION – SD1 = 0.070
   M. SEISMIC RESPONSE COEFFICIENT – Cs = 0.116
   N. SEISMIC DESIGN CATEGORY = B

Structural Solar L.L.C.
EXPEDIENT STRUCTURAL SOLUTIONS

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JON D. ANDREWS
Lic. No.048728
PROFESSIONAL ENGINEER

DATE: 02/27/2024
LICENSE EXPIRES: 02/28/2025

DATE: 09/07/2024

DESIGNED BY: SEO

NO.	DATE:	REVISIONS
	09/07/2024	PRELIMINARY REVIEW
	02/27/2024	PERMIT

GENERAL NOTES

S0.1

SPECIAL INSPECTIONS AND TESTS (IBC 2018)

1. THE PRIME CONTRACTOR SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PROVIDE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION ON THE TYPES OF WORK SPECIFIED BELOW AND IDENTIFY THE APPROVED AGENCIES TO THE BUILDING OFFICIAL.

2. THE APPROVED AGENCIES SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING THE COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION.

3. THE CONSTRUCTION OR WORK FOR WHICH SPECIAL INSPECTION OR TESTING IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION OR TESTING PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTIONS OR TESTS.

4. APPROVED AGENCIES SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND TESTS. THE APPROVED AGENCY SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TESTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED OR TESTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSTRUCTIONS AND TESTS, AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS OR TESTS, SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON PRIOR TO THE START OF WORK BY THE OWNER OR THE OWNER'S AUTHORIZED AGENT TO THE BUILDING OFFICIAL.

5. REFER TO 2018 INTERNATIONAL BUILDING CODE FOR DEFINITION OF TERMS.

SOILS CONSTRUCTION (OBC 1705.6)

1. VERIFY SUBGRADE IS ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY	☐ CONTINUOUS	☒ PERIODIC	PRIOR TO PLACEMENT OF CONCRETE.
2. VERIFY EXCAVATIONS EXTEND TO PROPER DEPTH AND MATERIAL	☐ CONTINUOUS	☒ PERIODIC	PRIOR TO PLACEMENT OF COMPACTED FILL OR CONCRETE.
3. VERIFY THAT SUBGRADE HAS BEEN APPROPRIATELY PREPARED PRIOR TO PLACING COMPACTED FILL	☐ CONTINUOUS	☒ PERIODIC	PRIOR TO PLACEMENT OF COMPACTED FILL.
4. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	☐ CONTINUOUS	☒ PERIODIC	ALL MATERIALS SHALL BE CHECKED AT EACH LIFT FOR PROPER CLASSIFICATIONS AND GRADATIONS NOT LESS THAN ONCE FOR EACH 10,000FT² OF SURFACE AREA.
5. VERIFY PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION.	☒ CONTINUOUS	☐ PERIODIC	

CONCRETE CONSTRUCTION (OBC 1705.3 AND OBC CHAPTER 19)

1. REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS	☐ CONTINUOUS	☒ PERIODIC	VERIFY PRIOR TO PLACING CONCRETE THAT REINFORCING IS OF SPECIFIED TYPE, GRADE AND SIZE; THAT IT IS FREE OF OIL, DIRT AND RUST; THAT IT IS LOCATED AND SPACED PROPERLY, THAT HOOKS, BENDS, TIES, STIRRUPS AND SUPPLEMENTAL REINFORCEMENT ARE PLACED CORRECTLY, THAT LAP LENGTHS, STAGGER AND OFFSETS ARE PROVIDED; AND THAT ALL MECHANICAL CONNECTIONS ARE INSTALLED PER THE MANUFACTURERS INSTRUCTIONS AND/OR EVALUATION REPORT. (REF. CHAPTER 20 AND SECTIONS 25.2, 25.3, & 26.6.1-26.6.3 OF ACI 318-14)
2. CAST-IN ANCHORS & EMBEDS	☐ CONTINUOUS	☒ PERIODIC	COMPLY WITH SECTIONS 1.9 & 17.8.2 OF ACI 318-14.
3A. POST-INSTALLED ANCHORS (ADHESIVE)	☒ CONTINUOUS	☐ PERIODIC	ALL POST-INSTALLED ANCHORS/DOWELS SHALL BE SPECIALLY INSPECTED AS REQUIRED BY THE APPROVED ICC-ES REPORT, AND SHALL COMPLY WITH SECTIONS 17.8.2, 26.7.2, AND 26.13.3.2&3 OF ACI 318-14.
3B. POST-INSTALLED ANCHORS (NON-ADHESIVE)	☐ CONTINUOUS	☒ PERIODIC	
4. USE OF REQUIRED MIX DESIGN	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT ALL MIXES USED COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS AND CHAPTER 19 & SECTIONS 26.4.3&4 OF ACI 318-14.
5. CONCRETE SAMPLING FOR STRENGTH TESTS, SLUMP, AIR CONTENT, AND TEMPERATURE	☐ CONTINUOUS	☒ PERIODIC	COMPLY WITH SECTIONS 26.4 & 26.12 OF ACI 318-14.
6. CONCRETE & SHOTCRETE PLACEMENT	☒ CONTINUOUS	☐ PERIODIC	COMPLY WITH SECTION 26.5 OF ACI 318-14 AND SECTION 1908 OF IBC.
7. CURING TEMPERATURE AND TECHNIQUES	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT THE AMBIENT TEMPERATURE FOR CONCRETE IS KEPT AT > 50°F FOR AT LEAST 7 DAYS AFTER PLACEMENT. HIGH-EARLY-STRENGTH CONCRETE SHALL BE KEPT AT > 50°F FOR AT LEAST 3 DAYS. ACCELERATED CURING METHODS MAY BE USED. THE AMBIENT TEMPERATURE FOR SHOTCRETE SHALL BE > 40°F FOR THE SAME PERIOD OF TIME AS NOTED FOR CONCRETE. SHOTCRETE SHALL BE KEPT CONTINUOUSLY MOIST FOR AT LEAST 24 HOURS AFTER SHOTCRETING. ALL CONCRETE MATERIALS, REINFORCEMENT, FORMS, FILLERS, AND GROUND SHALL BE FREE FROM FROST. IN HOT WEATHER CONDITIONS ENSURE THAT APPROPRIATE MEASURES ARE TAKEN TO AVOID PLASTIC SHRINKAGE CRACKING AND THAT THE SPECIFIED WATER/CEMENT RATIO IS NOT EXCEEDED. (REF SECTIONS 26.5.3 THRU 26.5.5 OF ACI 318-14)
8. PRE-STRESSED CONCRETE	☒ CONTINUOUS	☐ PERIODIC	COMPLY WITH SECTION 26.10.2 OF ACI 318-14.
9. ERECTION OF PRECAST CONCRETE	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT ALL PRECAST ELEMENTS ARE LIFTED, ASSEMBLED AND BRACED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
10. STRENGTH VERIFICATION FOR REMOVAL OF SHORES/FORMS AND FOR POST-TENSIONED CONCRETE	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT ADEQUATE STRENGTH HAS BEEN ACHIEVED PRIOR TO THE REMOVAL OF SHORES AND FORMS OR THE STRESSING OF POST-TENSIONED TENDONS.
11. FORMWORK	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT THE FORMS ARE PLACED PLUMB AND CONFORM TO THE SHAPES, LINES, AND DIMENSIONS OF THE MEMBERS AS REQUIRED BY THE APPROVED CONSTRUCTION DOCUMENTS.
12. VERIFICATION OF WELDABILITY OF REINFORCING STEEL	☐ CONTINUOUS	☒ PERIODIC	VERIFY WELDABILITY OF REINFORCING STEEL BASED UPON CARBON EQUIVALENT AND IN ACCORDANCE WITH AWS D1.4 & SECTION 26.6.4.1 OF ACI 318-14.

STRUCTURAL STEEL (OBC 1705.2.1, 1705.12.1 & 1705.13.1)

PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10):			
1. VERIFY WELDING PROCEDURES (WPS) AND CONSUMABLE CERTIFICATES	☒ CONTINUOUS	☐ PERIODIC	
2. MATERIAL IDENTIFICATION	☐ CONTINUOUS	☒ PERIODIC	VERIFY TYPE AND GRADE OF MATERIAL.
3. WELDER IDENTIFICATION	☐ CONTINUOUS	☒ PERIODIC	A SYSTEM SHALL BE MAINTAINED BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED.
4. FIT-UP GROOVE WELDS	☐ CONTINUOUS	☒ PERIODIC	VERIFY JOINT PREPARATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING.
5. ACCESS HOLES	☐ CONTINUOUS	☒ PERIODIC	VERIFY CONFIGURATION AND FINISH.
6. FIT-UP OF FILLET WELDS	☐ CONTINUOUS	☒ PERIODIC	VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OF STEEL SURFACES, AND TACK WELD QUALITY AND LOCATION.
DURING WELDING (TABLE N5.4-2, AISC 360-10):			
1. USE OF QUALIFIED WELDERS	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT WELDERS ARE APPROPRIATELY QUALIFIED.
2. CONTROL AND HANDLING OF WELDING CONSUMABLES	☐ CONTINUOUS	☒ PERIODIC	VERIFY PACKAGING AND EXPOSURE CONTROL.
3. CRACKED TACK WELDS	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT WELDING DOES NOT OCCUR OVER CRACKED TACK WELDS.
4. ENVIRONMENTAL CONDITIONS	☐ CONTINUOUS	☒ PERIODIC	VERIFY WIND SPEED IS WITHIN LIMITS AS WELL AS PRECIPITATION AND TEMPERATURE.
5. WPS FOLLOWED	☐ CONTINUOUS	☒ PERIODIC	VERIFY ITEMS SUCH AS SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.
6. WELDING TECHNIQUES	☐ CONTINUOUS	☒ PERIODIC	VERIFY INTERPASS AND FINAL CLEANING, EACH PASS IS WITHIN PROFILE LIMITATIONS, AND QUALITY OF EACH PASS.
AFTER WELDING (TABLE N5.4-3, AISC 360-10):			
1. WELDS CLEANED	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED.
2. SIZE, LENGTH, AND LOCATION OF WELDS	☒ CONTINUOUS	☐ PERIODIC	
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA	☒ CONTINUOUS	☐ PERIODIC	VERIFY CRACK PROHIBITION, WELD/BASE METAL FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY ARE ALL ACCEPTABLE
4. ARC STRIKES	☒ CONTINUOUS	☐ PERIODIC	
5. K-AREA	☒ CONTINUOUS	☐ PERIODIC	
6. BACKING & WELD TABS REMOVED	☒ CONTINUOUS	☐ PERIODIC	
7. REPAIR ACTIVITIES	☒ CONTINUOUS	☐ PERIODIC	
8. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT/MEMBER	☒ CONTINUOUS	☐ PERIODIC	
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-10):			
1. CJP WELDS (RISK CAT. II)	☐ CONTINUOUS	☒ PERIODIC	ULTRASONIC TESTING SHALL BE PERFORMED ON 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN MATERIALS 5/16 INCH THICK OR GREATER. TESTING RATE MUST BE INCREASED IF > 5% OF WELDS TESTED HAVE UNACCEPTABLE DEFECTS PER SECTION N5.5F.
2. CJP WELDS (RISK CAT. III OR IV)	☒ CONTINUOUS	☐ PERIODIC	ULTRASONIC TESTING SHALL BE PERFORMED ON ALL CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN MATERIALS 5/16 INCH THICK OR GREATER. A REDUCTION IN THE RATE OF ULTRASONIC TESTING IS ALLOWED PER SECTION N5.5E.
3. ACCESS HOLES (FLANGE > 2")	☒ CONTINUOUS	☐ PERIODIC	MAGNETIC PARTICLE TESTING OR PENETRANT TESTING SHALL BE PERFORMED. ANY CRACK SHALL BE DEEMED UNACCEPTABLE
4. WELDED JOINTS SUBJECT TO FATIGUE	☒ CONTINUOUS	☐ PERIODIC	REFER TO APPENDIX 3, TABLE A-3.1.
PRIOR TO BOLTING (TABLE N5.6-1, AISC 360-10): NOT REQUIRED IF ONLY SNUG-TIGHT JOINTS ARE SPECIFIED [PER SECTION N5.6(1) OF AISC 360-10].			
1. CERTIFICATIONS OF FASTENERS	☒ CONTINUOUS	☐ PERIODIC	
2. FASTENERS MARKED	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT FASTENERS HAVE BEEN MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.
3. PROPER FASTENERS FOR JOINT	☐ CONTINUOUS	☒ PERIODIC	VERIFY GRADE, TYPE, AND BOLT LENGTH IF THREADS ARE EXCLUDED FROM THE SHEAR PLANE.
4. PROPER BOLTING PROCEDURE	☐ CONTINUOUS	☒ PERIODIC	VERIFY PROPER PROCEDURE IS USED FOR THE JOINT DETAIL.
5. CONNECTING ELEMENTS	☐ CONTINUOUS	☒ PERIODIC	VERIFY APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET REQUIREMENTS.
6. PRE-INSTALLATION VERIFICATION TESTING	☐ CONTINUOUS	☒ PERIODIC	OBSERVE AND DOCUMENT VERIFICATION TESTING BY INSTALLATION PERSONNEL FOR FASTENER ASSEMBLIES AND METHODS USED. COMPONENTS.
7. PROPER STORAGE	☐ CONTINUOUS	☒ PERIODIC	VERIFY PROPER STORAGE OF BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS.
DURING BOLTING (TABLE N5.6-2, AISC 360-10): NOT REQUIRED IF ONLY SNUG-TIGHT JOINTS ARE SPECIFIED [PER SECTION N5.6(1) OF AISC 360-10]. NOT REQUIRED FOR PRETENSIONED JOINTS USING TURN-OF-THE-NUT METHOD WITH MATCH-MARKING, DIRECT-TENSION-INDICATORS, OR TWIST-OFF TYPE TENSION CONTROL METHOD [PER SECTION N5.6(2) OF AISC 360-10].			
1. FASTENER ASSEMBLIES	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT FASTENER ASSEMBLIES ARE OF SUITABLE CONDITION, PLACED IN ALL HOLES, AND WASHERS ARE POSITIONED AS REQUIRED.
2. SNUG-TIGHT PRIOR TO PRETENSIONING	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT JOINTS ARE BROUGHT TO SNUG-TIGHT CONDITION PRIOR TO PRETENSIONING OPERATION.
3. FASTENER COMPONENT	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT FASTENER COMPONENT IS NOT TURNED BY WRENCH PREVENTED FROM ROTATING.
4. PRETENSIONED FASTENERS	☐ CONTINUOUS	☒ PERIODIC	VERIFY THAT FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.
AFTER BOLTING (TABLE N5.6-3, AISC 360-10):			
1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	☒ CONTINUOUS	☐ PERIODIC	
OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-10; TABLES J8-1 & J10-1, AISC 341-10):			
1. STRUCTURAL STEEL DETAILS	☐ CONTINUOUS	☒ PERIODIC	ALL FABRICATED STEEL OR STEEL FRAMES SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN IN THE CONSTRUCTION DOCUMENTS, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.
2. ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL	☐ CONTINUOUS	☒ PERIODIC	SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS. VERIFY THE DIAMETER, GRADE, TYPE, AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.
3. REDUCED BEAM SECTIONS (RBS)	☒ CONTINUOUS	☐ PERIODIC	VERIFY CONTOUR AND FINISH AS WELL AS DIMENSIONAL TOLERANCES (SEE TABLE J8-1 OF AISC 341-10).
4. PROTECTED ZONES	☒ CONTINUOUS	☐ PERIODIC	VERIFY THAT NO HOLES OR UNAPPROVED ATTACHMENTS ARE MADE WITHIN THE PROTECTED ZONE (SEE TABLE J8-1 OF AISC 341-10).
5. H-PILES	☒ CONTINUOUS	☐ PERIODIC	VERIFY THAT NO HOLES OR UNAPPROVED ATTACHMENTS OCCUR WITHIN THE PROTECTED ZONES OF PILING (SEE TABLE J10-1 OF AISC 341-10).

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TESTING & INSPECTION NOTES

S0.2

ABBREVIATIONS

ADDL	ADDITIONAL	LL	LIVE LOAD
ALT	ALTERNATE	LLH	LONG LEG HORIZONTAL
ALUM	ALUMINUM	LLV	LONG LEG VERTICAL
APPROX	APPROXIMATE	LSL	LONG SLOT
ARCH	ARCHITECT(URAL)	LVL	LAMINATED VENEER LUMBER
ASSY	ASSEMBLY	LW	LIGHT WEIGHT
B/	BOTTOM OF	MAX	MAXIMUM
BLDG	BUILDING	MECH	MECHANICAL
BM	BEAM	MED	MEDIUM
BOT	BOTTOM	MEP	MECHANICAL, ELECTRICAL PLUMBING
BRDG	BRIDGING	MEZZ	MEZZANINE
BRG	BEARING	MFR	MANUFACTURER
BRKT	BRACKET	MIN	MINIMUM
BW	BOTH WAYS	MISC	MISCELLANEOUS
C/C	CENTER TO CENTER	MK	MARK
CCD	CHICAGO CITY DATUM	MO	MASONRY OPENING
CIP	CAST IN PLACE	MTL	METAL
CJ	CONSTRUCTION JOINT, CONTROL JOINT	NIC	NOT IN CONTRACT
CJP	COMPLETE JOINT PENETRATION	NOM	NOMINAL
CL	CENTERLINE	NS	NEAR SIDE
CLR	CLEAR	NTS	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT	NW	NORMAL WEIGHT
COL	COLUMN	OC	ON CENTER
CONC	CONCRETE	OD	OUTSIDE DIAMETER
CONN	CONNECTION	OPNG	OPENING
CONT	CONTINUOUS	OPP	OPPOSITE
COORD	COORDINATE, COORDINATION	OPP HD	OPPOSITE HAND
CTR	CENTER	PC	PRECAST CONCRETE
CU FT	CUBIC FOOT	PCF	POUNDS PER CUBIC FOOT
CU YD	CUBIC YARD	PERIM	PERIMETER
DBA	DEFORMED BAR ANCHOR	PERP	PERPENDICULAR
DEG	DEGREE	PL	PLATE
DEMO	DEMOLISH	PLF	POUNDS PER LINEAR FOOT
DIA	DIAMETER	PLUMB	PLUMBING
DIM	DIMENSION	PLYWD	PLYWOOD
DL	DEAD LOAD	PROJ	PROJECT
DWG	DRAWING	PSF	POUNDS PER SQUARE FOOT
DWGS	DRAWINGS	PSI	POUNDS PER SQUARE INCH
(E)	EXISTING	PSL	PARALLEL STRAND LUMBER
EA	EACH	PT	POST TENSIONED
EF	EACH FACE	QTY	QUANTITY
EL	ELEVATION	RAD	RADIUS
ELEC	ELECTRICAL	REBAR	REINFORCING BAR
EMBED	EMBEDDED	REF	REFER, REFERENCE
ENGR	ENGINEER	REINF	REINFORCE, REINFORCEMENT
EOD	EDGE OF DECK	REQD	REQUIRED
EOS	EDGE OF SLAB	REV	REVISION
EQ	EQUAL, EQUIVALENT	RO	ROUGH OPENING
EQUIP	EQUIPMENT	SC	SLIP CRITICAL
EW	EACH WAY	SCHED	SCHEDULE
EXIST	EXISTING	SE	STRUCTURAL ENGINEER
EXP JT	EXPANSION JOINT	SECT	SECTION
EXT	EXTERIOR	SF	SQUARE FOOT
FF	FINISHED FLOOR	SHT	SHEET
FIN	FINISH	SIM	SIMILAR
FLR	FLOOR	SOG	SLAB ON GRADE
FDN	FOUNDATION	SPECS	SPECIFICATIONS
FS	FAR SIDE	SQ	SQUARE
FT	FOOT, FEET	SQ FT	SQUARE FOOT (FEET)
FTG	FOOTING	SS	STAINLESS STEEL
GA	GAUGE	SSL	SHORT SLOT
GALV	GALVANIZED	STD	STANDARD
GB	GRADE BEAM	STIFF	STIFFENER
GC	GENERAL CONTRACTOR	STL	STEEL
GYP	GYPSUM	STRUCT	STRUCTURAL
GYP BD	GYPSUM BOARD	SYM	SYMMETRICAL
HORIZ	HORIZONTAL	t	THICKNESS
ID	INSIDE DIAMETER	T&B	TOP & BOTTOM
IN	INCH(ES)	T/	TOP OF
INFO	INFORMATION	TEMP	TEMPORARY
INSUL	INSULATION	THRU	THROUGH
INT	INTERIOR	TYP	TYPICAL
JST	JOIST	UNO	UNLESS NOTED OTHERWISE
JT	JOINT	VERT	VERTICAL
K	KIPS	VIF	VERIFY IN FIELD
KSI	KIPS PER SQUARE INCH	W/	WITH
LAT	LATERAL	W/O	WITHOUT
LB	POUND	WF	WIDE FLANGE
LFH	LONG FACE HORIZONTAL	WP	WORKING POINT
LFV	LONG FACE VERTICAL	WWF	WELDED WIRE FABRIC
LIN	LINEAR	YD	YARD

MARK DESIGNATIONS

Bx	INDICATES BEAM TYPE. REFER TO BEAM SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
BPx	INDICATES BASE PLATE TYPE. REFER TO BASE PLATE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
BFx	INDICATES BRACED FRAME TYPE. REFER TO BRACED FRAME ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION.
Cx	INDICATES COLUMN TYPE. REFER TO COLUMN SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
CCx	INDICATES CAISSON CAP TYPE. REFER TO CAISSON CAP SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
CSx	INDICATES CAISSON TYPE. REFER TO CAISSON SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
DPx	INDICATES DRIVEN / DRILLED PILE TYPE. REFER TO DRIVEN / DRILLED PILE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
Fx	INDICATES SPREAD FOOTING TYPE. REFER TO FOOTING SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
GBx	INDICATES GRADE BEAM TYPE. REFER TO GRADE BEAM SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
Jx	INDICATES JOIST TYPE. REFER TO JOIST SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
Lx	INDICATES LINTEL TYPE. REFER TO LINTEL SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
Px	INDICATES PIER TYPE. REFER TO PIER DETAILS FOR ADDITIONAL INFORMATION.
PCx	INDICATES PILE CAP TYPE. REFER TO PILE CAP DETAILS FOR ADDITIONAL INFORMATION.
PCBx	INDICATES PRECAST BEAM BY PRECAST MANUFACTURER.
PCPx	INDICATES PRECAST PLANK TYPE BY PRECAST MANUFACTURER.
PTBx	INDICATES POST TENSIONED BEAM TYPE. REFER TO POST TENSIONED BEAM SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
SWx	INDICATES SHEAR WALL TYPE. REFER TO SHEAR WALL ELEVATIONS, SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION.
SWBx	INDICATES SHEAR WALL BEAM TYPE. REFER TO SHEAR WALL BEAM SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.

HATCH PATTERNS

	EARTH / NATIVE SOIL
	GRAVEL
	GROUT / SAND
	CONCRETE
	STEEL
	WOOD
	CONCRETE MASONRY (PLAN)
	CONCRETE MASONRY (ELEVATION)
	GEOFOAM
	PRECAST
	DEMOLITION

GENERAL SYMBOLS

X	REVISION
	REVISION CLOUD
NORTH	NORTH ARROW
	ELEVATION TARGET
	SLAB STEP
	RAMP SLOPE UP
	RAMP SLOPE DOWN
SX	INDICATES SPAN DIRECTION OF ONE WAY SLAB OR METAL ROOF DECK
SX	INDICATES SPAN DIRECTION OF TWO WAY SLAB

TYPICAL STEEL BEAM DESIGNATIONS

WXxXX (X) <C=X"> [-X X/X"]	
(X)	INDICATES NUMBER OF X/X" ØXX" WELDED HEADED STUDS UNIFORMLY SPACED ALONG THE BEAM AND SLAB INTERFACE LENGTH. REFER TO DETAIL XX/SX.X FOR ADDITIONAL INFORMATION.
<C=X">	INDICATES REQUIRED CAMBER UP FOR FLOOR FRAMING. INSTALL ALL BEAMS AND GIRDERS WITHOUT CAMBER SPECIFIED WITH NATURAL CAMBER UP.
[-X X/X"]	INDICATES ELEVATION DIFFERENCE BETWEEN TYPICAL T/STEEL ELEVATION AND THIS MEMBER

STEEL FRAMING SYMBOLS

	MOMENT CONNECTION
	DRAG STRUT CONNECTION
	SLIP CRITICAL CONNECTION
	SLIDE BEARING CONNECTION
X	BEAM OPENING. REFER TO BEAM OPENING SCHEDULE FOR ADDITIONAL INFORMATION.
	STAIR CONNECTION
	COLUMN OR BEAM SPLICE
	COLUMN ABOVE
	ROOF DAVIT
	ROOF TIEBACK
	ROOF FALL ARREST
RTU-# XXX LBS	ROOFTOP UNIT DESIGNATION

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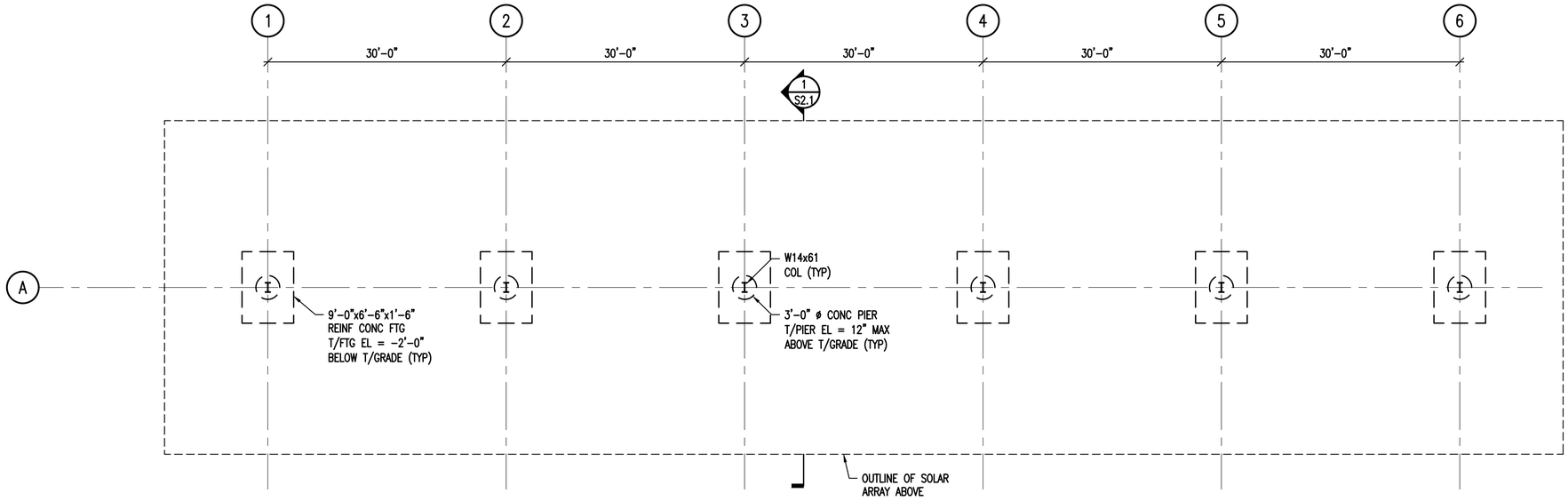
SYMBOLS & ABBREVIATION

S0.3



1 CANOPY FOUNDATION PLAN

0 2' 4' 8' 16'

SCALE: 1/8" = 1'-0"

NORTH

NOTES:

1. RECORDS OF ANY EXISTING SUBGRADE INTERFERENCES OTHER THAN THOSE INTERFERENCES SHOWN OR INDICATED ON THE CONSTRUCTION DOCUMENTS, ARE NOT CURRENTLY AVAILABLE. DURING EXCAVATION WORK, INTERFERENCES MAY BE DISCOVERED. CONTRACTOR SHALL DOCUMENT CONSTRUCTION-RELATED DIMENSIONS OF ALL INTERFERENCES. CONTRACTOR TO FURNISH THE ABOVE INFORMATION IN THE FORM OF DETAILED SKETCHES TO THE STRUCTURAL ENGINEER FOR REVIEW.
2. GENERAL CONTRACTOR SHALL COORDINATE WITH CIVIL/SITE LAYOUT FOR LOCATION OF CANOPY STRUCTURE. COORDINATE WITH THE PARKING LAYOUT SUCH THAT THE NEW CANOPY COLUMNS DO NOT INTERFERE WITH ANY PARKING SPACES.

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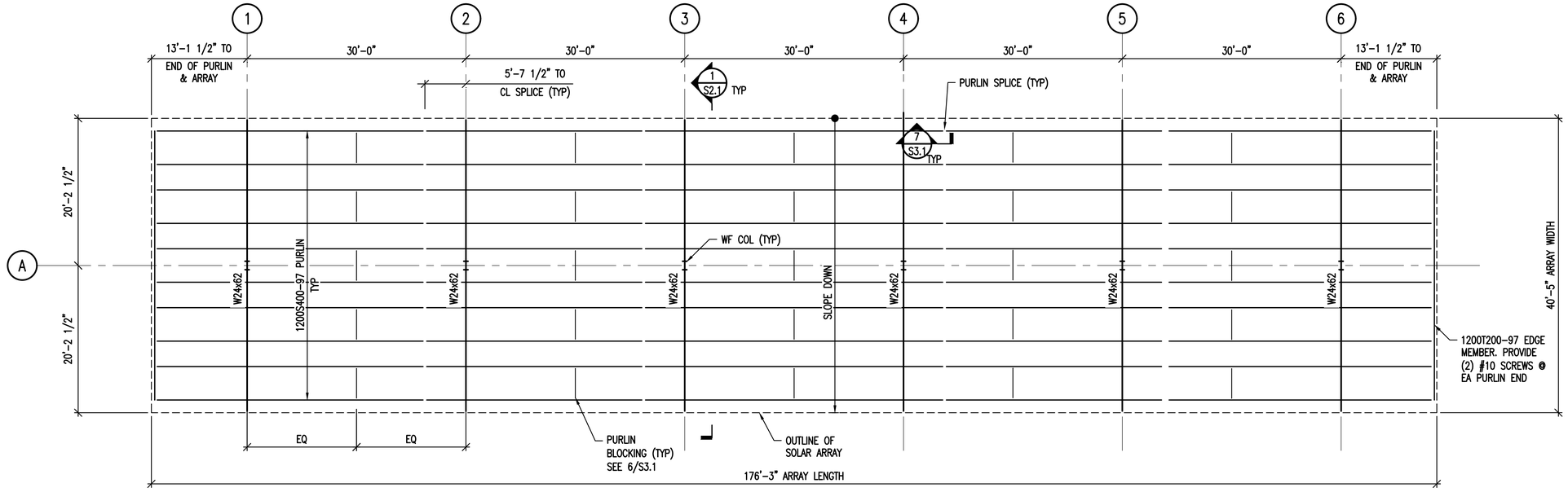
CANOPY FOUNDATION PLAN

S1.1



1 CANOPY FRAMING PLAN

0 2' 4' 8' 16'

SCALE: 1/8" = 1'-0"

NORTH

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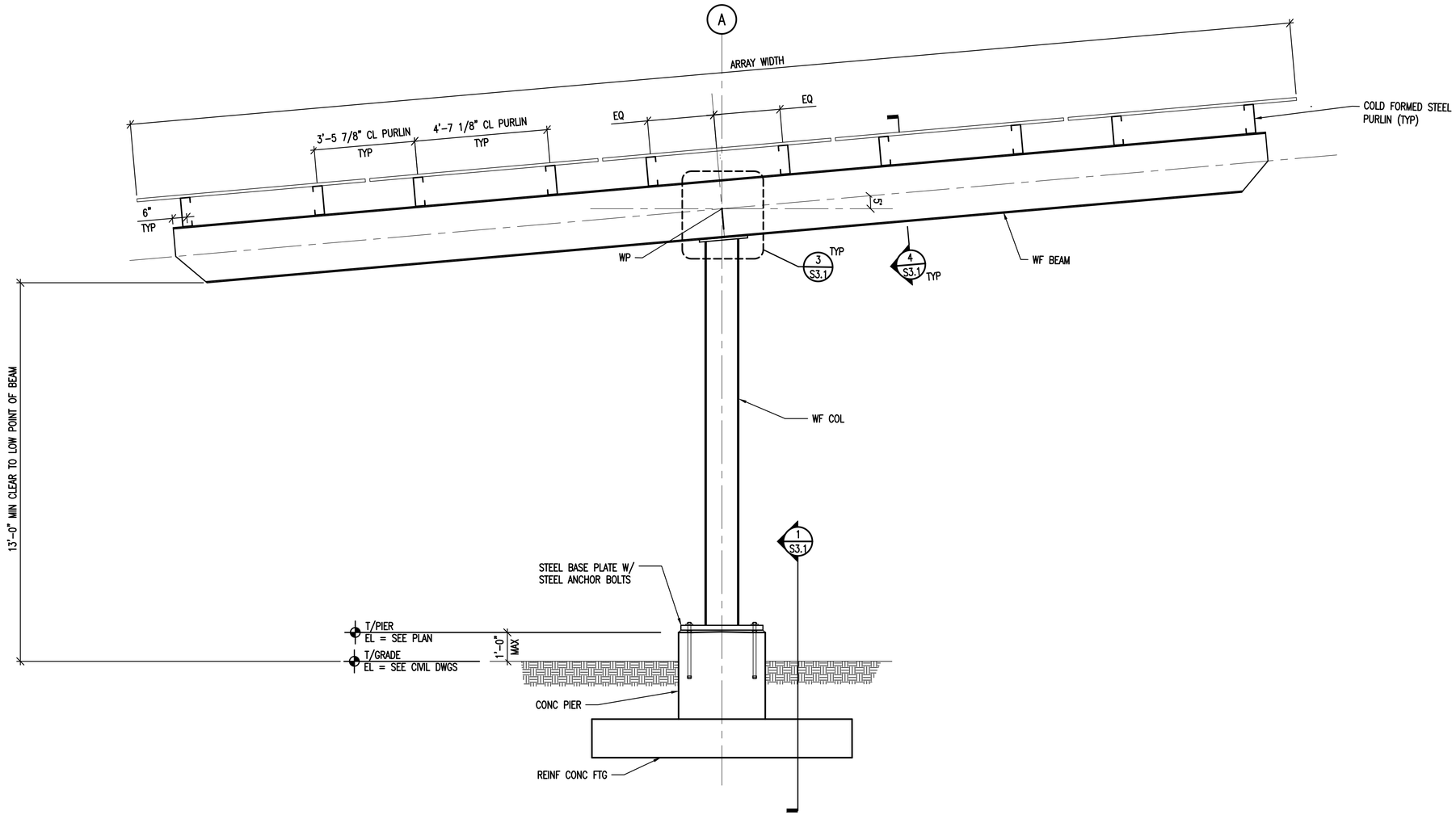
DATE: **09/07/2024**

DESIGNED BY: **SEO**

NO.	DATE:	REVISIONS
	09/07/2024	PRELIMINARY REVIEW
	02/27/2024	PERMIT

CANOPY FRAMING PLAN

S1.2



1 CANOPY FRAMING SECTION

0 6" 1' 2' 4'

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

NOTES:

1. WP – INDICATES WORK POINT INTERSECTION OF STRUCTURAL MEMBER CENTERLINES.
2. CANOPY FRAMING IS SYMMETRIC ABOUT THE COLUMN CENTERLINE.

Structural Solar L.L.C.
EFFICIENT STRUCTURAL SOLUTIONS

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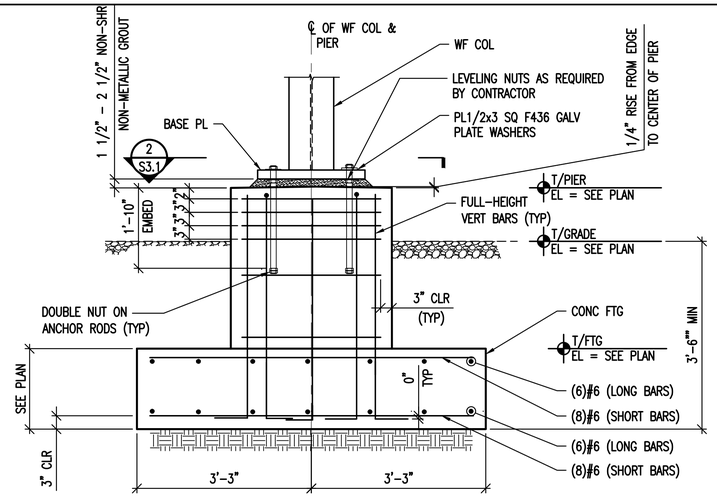
FRAMING SECTION

S2.1

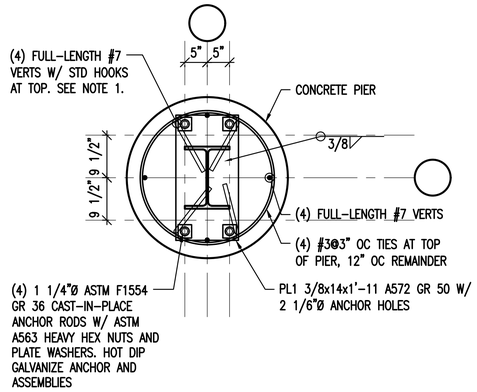


1 BASE PLATE AND CONCRETE PIER AND FOOTING SECTION

SCALE: NOT TO SCALE

NOTES:

1. REFER TO FOUNDATIONS NOTES ON S0.1.
2. ALL REINFORCEMENT SHALL BE EPOXY COATED.

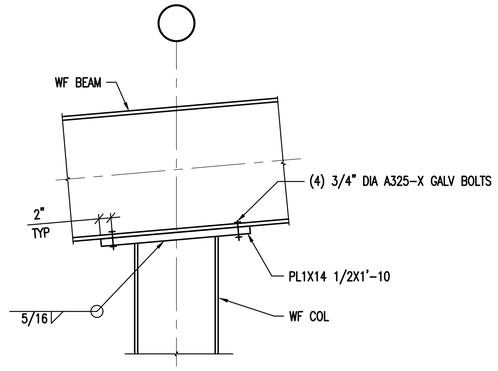


2 BASE PLATE AND CONCRETE DRILLED PIER PLAN

SCALE: NOT TO SCALE

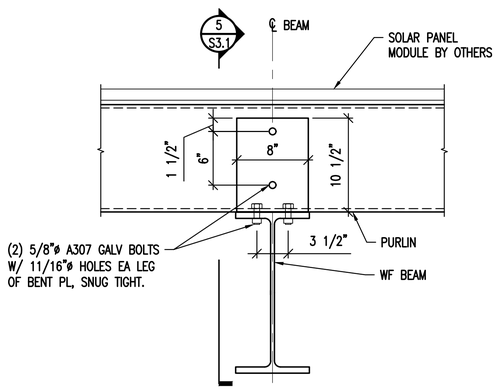
NOTES:

1. PLACE (1) #7 VERTICAL W/ TOP HOOK WITHIN 4" OF EACH ANCHOR.



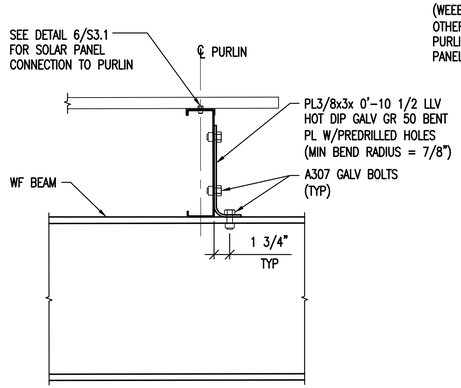
3 TYPICAL TOP BEAM TO COLUMN CONNECTION DETAIL

SCALE: NOT TO SCALE



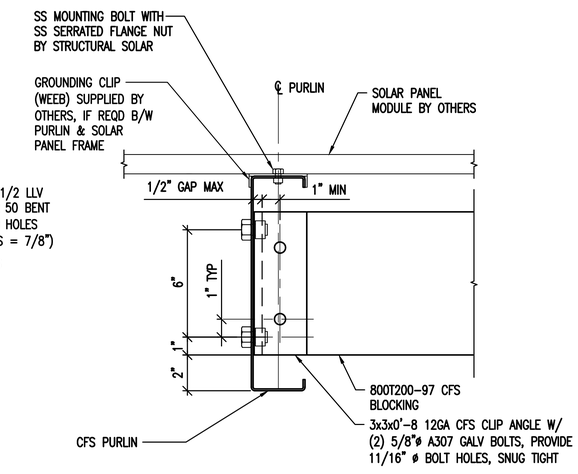
4 TYPICAL PURLIN TO BEAM CONNECTION

SCALE: NOT TO SCALE



5 TYPICAL PURLIN TO BEAM CONNECTION

SCALE: NOT TO SCALE

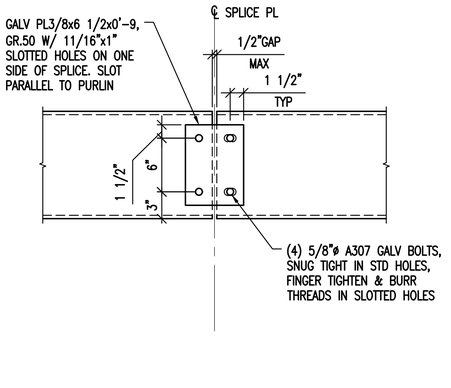


6 TYPICAL PURLIN BLOCKING CONNECTION DETAIL

SCALE: NOT TO SCALE

NOTES:

1. CFS – INDICATES COLD-FORMED STEEL. SEE NOTES ON S0.1.



7 TYPICAL SPLICE PLATE CONNECTION DETAIL

SCALE: NOT TO SCALE

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DETAILS

S3.1