GENERAL STRUCTURAL NOTES

A. BUILDING CODES AND STANDARDS

1. THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION AND QUALITY CONTROL OF ALL WORK PERFORMED ON THE PROJECT.
   a. "INTERNATIONAL BUILDING CODE - 2018 INTERNATIONAL CODE COUNCIL, INC.

   b. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", (ANSI/ASCE 7) AMERICAN SOCIETY OF CIVIL ENGINEERS.

2. ADDITIONAL DESIGN STANDARDS FOR MATERIALS SHALL BE FOUND IN THE APPROPRIATE SECTIONS THAT FOLLOW. SEE THOSE SECTIONS FOR THE APPLICABLE CODES.

B. DESIGN LOADS

1. GRAVITY - SUPERIMPOSED DEAD LOADS
   a. ROOF (STEEL FRAMED)

ROOFING (NO BALLAST)	2 PSF
INSULATING CONCRETE	10 PSF
METAL DECK	2 PSF
JOISTS AND BEAMS	3 PSF
MECHANICAL/ELECTRICAL	3 PSF
TOTAL	20 PSF

2. GRAVITY - ROOF LIVE LOADS
   a. LIVE LOAD — 20 PSF (NOT REDUCIBLE)
   b. SNOW LOAD (PLUS DRIFTING WHERE APPLICABLE)

1)	GROUND SNOW LOAD (Pg)	30 PSF
2)	SNOW EXPOSURE FACTOR (Ce)	1.0
3)	SNOW LOAD IMPORTANCE FACTOR (Is)	1
4)	THERMAL FACTOR (Ct)	1.0
5)	SLOPE FACTOR(s), (Cs)	1.0
6)	FLAT ROOF SNOW LOAD (Pf)	21 PSF, 30 PSF USED FOR DESIGN
7)	DRIFT SURCHARGE LOADS (Pd WHERE Pd + Pf > 20PSF)	58 PSF
8)	WIDTH OF SNOW DRIFT(s), (w)	13 FEET

3. LATERAL LOADS - SEISMIC

a.	RISK CATEGORY	II
b.	SPECTRAL RESPONSE ACCELERATION FOR SHORT PERIOD (Ss)	0.179
c.	SPECTRAL RESPONSE ACCELERATION FOR 1-SECOND PERIOD (S1)	0.058
d.	SPECTRAL RESPONSE COEFFICIENT (SDS)	0.191
e.	SPECTRAL RESPONSE COEFFICIENT (SD1)	0.093
f.	SITE CLASS	D
g.	SEISMIC DESIGN CATEGORY	B
h.	BASIC SEISMIC FORCE RESISTING SYSTEM(S)	STEEL NOT SPECIFICALLY DESIGNED FOR SEISMIC LOADING
i.	RESPONSE MODIFICATION FACTOR(S) (R)	3
j.	SEISMIC RESPONSE COEFFICIENT(S) (Cs)	0.064
k.	ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE

4. THE STRUCTURE HAS BEEN DESIGNED FOR THE DEAD, LIVE AND LATERAL LOADS INDICATED ABOVE. ANY INCREASE OF LOADS DUE TO CHANGE IN USAGE OR CONSTRUCTION MATERIALS, ETC. SHALL HAVE THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER. THE CONTRACTOR IS CAUTIONED AS TO NOT STORE ANY CONSTRUCTION MATERIALS OR UNDERTAKE ANY CONSTRUCTION OPERATIONS WHICH WILL EXCEED THE DESIGN LIVE LOAD CAPACITIES NOTED.

5. WEIGHT OF EQUIPMENT SHOWN ON THE STRUCTURAL DRAWINGS HAS BEEN CONSIDERED IN THE FRAMING DESIGN. ANY ADDITIONAL EQUIPMENT NOT SHOWN ON THE STRUCTURAL DRAWINGS AND EXCEEDING 300 POUNDS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR APPROVAL PRIOR TO INSTALLATION. COORDINATE ALL WORK WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.

C. CONSTRUCTION

1. GENERAL
   a. THESE DRAWINGS REPRESENT THE COMPLETED PROJECT WHICH HAS BEEN DESIGNED FOR THE STRUCTURE DEAD LOADS AND FOR THE SUPERIMPOSED LIVE LOADS INDICATED IN THE DESIGN LOADS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, TEMPORARY BRACING, SHEETING AND SHORING, ETC.

   b. IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES AND ALL OSHA REGULATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

   c. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES AND DRAWINGS, THE MOST RIGID REQUIREMENT SHALL GOVERN.

   d. STRUCTURAL DOCUMENTS ARE NOT STAND-ALONE DOCUMENTS, THE ARCHITECTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS, SECTIONS, AND DETAILS. REPORT DISCREPANCIES IMMEDIATELY TO THE ARCHITECT AND THE STRUCTURAL ENGINEER. DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS NOR FOR DETAILING.

   e. DRAWINGS IN DIGITAL FORMAT, INCLUDING, BUT NOT LIMITED TO AUTOCAD OR REVIT, ARE FOR CONVENIENCE ONLY AND DO NOT CONSTITUTE CONTRACT DOCUMENTS. PROVIDENCE OFFERS NO WARRANTIES, EXPRESSED NOR IMPLIED, REGARDING THE ACCURACY OF SUCH DIGITAL FILES. CONTRACT BINDING DOCUMENTS ARE THE DESIGN DRAWINGS IN "PORTABLE DOCUMENT FORMAT" (PDF) ONLY.

   f. DRAWINGS LABELED AS "ISSUED FOR PERMIT" OR OTHER PROGRESS DESIGNATION, AND NOT SPECIFICALLY LABELED AS "ISSUED FOR CONSTRUCTION", SHALL NOT BE CONSIDERED AS CONSTRUCTION DOCUMENTS NOR ISSUED FOR CONSTRUCTION PURPOSES.

   g. THE CONTRACTOR SHALL CHECK AND VERIFY DIMENSIONS AND ELEVATIONS FOR ALL WORK BEFORE PROCEEDING WITH THE CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO THE START OF ANY WORK.

   h. CONSULT ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR VERIFICATION OF LOCATION AND SIZE OF ALL OPENINGS, SLEEVES, REVEALS, DEPRESSIONS, INSERTS, CONCRETE HOUSEKEEPING PADS, HANDRAILS, GUARDRAILS, PARTITION SUPPORTS, LINTELS, ETC. REQUIRED FOR THE PROJECT. VERIFY REQUIREMENTS OF TRADES AFFECTING THE WORK AND NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY CONFLICTS.

   i. THE FRAMING MEMBERS INDICATED ON THE DOCUMENTS SHALL BE CONSIDERED A MINIMUM PROJECT REQUIREMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SUPPLEMENTAL AND/OR ADDITIONAL FRAMING INCLUDING JOISTS, HEADERS, RAFTERS, BEAMS, ETC. AT NO ADDITIONAL COST TO THE OWNER, AS REQUIRED AND RESULTING FROM CONTRACTOR'S COORDINATION OF ALL PROJECT TRADES.

   j. SEE ARCHITECTURAL DRAWINGS FOR DEMOLITION REQUIREMENTS (IF ANY).

   k. WORK NOT INCLUDED ON THE DRAWINGS BUT IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES ELSEWHERE ON THE DRAWINGS SHALL BE REPEATED.

   l. EXISTING BUILDING INFORMATION SHOWN IS BASED ON EXISTING BUILDING DRAWINGS, FIELD OBSERVATIONS, AND/OR ARCHITECTURAL DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING INFORMATION SHOWN (DIMENSIONS, ELEVATIONS, FRAMING, ETC.) AND NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO SHOP DRAWING PREPARATION, FABRICATION AND CONSTRUCTION. NEW SLABS ARE TO BE AT THE SAME ELEVATIONS AS ADJACENT EXISTING SLABS, UNLESS INDICATED OTHERWISE. FOUNDATION ELEVATIONS OR COLUMN LENGTHS SHALL BE ADJUSTED WITH THE APPROVAL OF THE STRUCTURAL ENGINEER TO ACHIEVE MATCHING SLAB ELEVATIONS.

   m. ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO THE CONTRACTOR'S MIS-LOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.

   n. SEE ARCHITECTURAL DRAWINGS FOR DETAILED INFORMATION REGARDING FINISHES, DAMPPROOFING, WATERPROOFING, UL ASSEMBLY DESIGNATIONS AND FIREPROOFING REQUIREMENTS, ETC.

   o. STRUCTURAL COMPONENTS ARE NOT DESIGNED FOR VIBRATORY EQUIPMENT. PLACE VIBRATORY EQUIPMENT ON VIBRATION ISOLATORS APPROPRIATE FOR EQUIPMENT AND USE OF SPACE. VIBRATION ISOLATION HAS NOT BEEN PROVIDED BY THE STRUCTURAL ENGINEER.

   p. CONSTRUCTION IS TO BE IN SUCH A MANNER THAT NO CRANE LOADS OR ANY OTHER UNAPPROVED CONSTRUCTION LOADS ARE PLACED ON ELEVATED STRUCTURE DURING CONSTRUCTION.

2. SHOP DRAWINGS
   a. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS, INCLUDING ALL CONCRETE AND GROUT MIX DESIGNS AND ADMIXTURES, MUST BE SUBMITTED BY THE GENERAL CONTRACTOR AND REVIEWED BY THE STRUCTURAL ENGINEER. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S APPROVAL STAMP CERTIFYING HE HAS VERIFIED ALL CONSTRUCTION CRITERIA INCLUDING FIELD MEASUREMENTS, MATERIAL AND SIMILAR DATA AND HAS CHECKED THE SUBMITTAL FOR COMPLETENESS, COORDINATION AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

   b. REVIEW IS ONLY FOR GENERAL COMPATIBILITY WITH THE DESIGN CONCEPT OF THE COMPLETED PROJECT AS A FUNCTIONING WHOLE AS INDICATED BY THE CONTRACT DOCUMENTS, AND FOR GENERAL CONFORMANCE WITH REQUIREMENTS OF THE CONTRACT DOCUMENTS. ANY REVIEW OR COMMENTS DO NOT MODIFY THE CONTRACTOR'S INDEPENDENT DUTY TO STRICTLY COMPLY WITH THE CONTRACT DOCUMENTS. PROVIDENCE ASSUMES NO RESPONSIBILITY FOR DIMENSIONS OR QUANTITIES. PROVIDENCE'S REVIEW SHALL NOT CONSTITUTE APPROVAL OF THE MEANS, METHODS, TECHNIQUES, SEQUENCES, OPERATIONS OF CONSTRUCTION OR SAFETY PRECAUTIONS OR PROGRAMS INCIDENTAL THERETO, WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR REMAINS RESPONSIBLE FOR DETAIL AND ACCURACY, FOR PERFORMING ALL WORK IN A SAFE AND SATISFACTORY MANNER, AND COORDINATING THE WORK OF ALL TRADES.

   c. UNAUTHORIZED REPRODUCTION OF ANY PORTION OF THE STRUCTURAL DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER MAY BE REJECTED AND RETURNED.

   d. IF THE CONTRACTOR OR OWNER FAILS TO OBTAIN THE STRUCTURAL ENGINEER'S REVIEW OF THE SHOP DRAWINGS, THE STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. SHOP DRAWINGS ARE REVIEWED BY THE STRUCTURAL ENGINEER AS A CONVENIENCE TO THE GENERAL CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT.

   e. AT THE TIME OF SHOP DRAWING SUBMISSION, THE GENERAL CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER, IN WRITING, OF ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS.

   f. AFTER REVIEW OF SUBMITTAL, PROVIDENCE WILL INDICATE THE APPROPRIATE ACTION ON SUBMITTAL WITH AN ACTION STAMP TO INDICATE ONE OF THE FOLLOWING:
      1) REVIEWED, NO EXCEPTIONS - WORK MAY PROCEED
      2) REVIEWED, EXCEPTIONS NOTED - WORK MAY PROCEED BASED ON CORRECTIONS INDICATED
      3) REVIEWED, EXCEPTIONS NOTED, RESUBMIT FILE COPY - WORK MAY PROCEED BASED ON CORRECTIONS INDICATED
      4) REJECTED, REVISE AND RESUBMIT - WORK MAY NOT PROCEED
      5) INFORMATION ONLY - INFORMATION ONLY SUBMITTALS INCLUDE, BUT ARE NOT LIMITED TO QUALITY CONTROL PROCEDURES, MATERIAL CERTIFICATES, MANUFACTURER DATA, INSPECTION REPORTS, AND CLOSEOUT DOCUMENTS.

   g. PROVIDENCE IS NOT RESPONSIBLE FOR RESUBMITTALS NOR TRACKING PROGRESS OF RESUBMITTALS.

D. STRUCTURAL STEEL

1. DESIGN STANDARDS
   a. "STEEL CONSTRUCTION MANUAL", LATEST EDITION, AISC (INCLUDING "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", AISC 360, "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", RCSC, "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", AISC)

   b. "DETAILING FOR STEEL CONSTRUCTION", AISC.

   c. "STRUCTURAL WELDING CODE - STEEL", AWS D1.1.

2. MATERIALS

a.	W-SHAPES AND WT's	ASTM A992, Fy = 50 KSI
b.	CHANNELS, ANGLES AND PLATES	ASTM A36, Fy = 36 KSI
c.	M, S, AND HP SHAPES	ASTM A36, Fy = 36 KSI
d.	STEEL PIPE	ASTM A53, GRADE B, Fy = 35 KSI
e.	HIGH STRENGTH BOLTS	ASTM F3125, GRADE A325, TYPE 1 (UNLESS NOTED OTHERWISE ON DRAWINGS)
f.	WASHERS AND NUTS	ASTM F436 AND ASTM A563
g.	THREADED RODS	ASTM A36
h.	WELDING ELECTRODES	AWS A5.1 OR A5.5, E70XX
i.	EXPANSION BOLTS	HILTI KWIK BOLT 3, DEWALT/POWERS POWER-STUD+SD1 OR APPROVED EQUAL SUBMIT ICC-ES REPORT(S) FOR ANY PROPOSED EQUAL
j.	ADHESIVE ANCHORS	HILTI HIT HY200, DEWALT/POWERS AC 200+ OR HIT-HY270 ADHESIVE SYSTEM, DEWALT/POWERS AC100+GOLD ADHESIVE SYSTEM OR APPROVED EQUAL SUBMIT ICC-ES REPORT(S) FOR ANY PROPOSED EQUAL
k.	NON-SHRINK GROUT UNDER PLATES	MINIMUM COMPRESSIVE STRENGTH = 5,000 PSI

3. GENERAL
   a. THE CONTRACTOR SHALL DESIGN AND INSTALL ALL NECESSARY TEMPORARY SUPPORTS, GUYING AND OTHER BRACING TO PROVIDE LATERAL STABILITY OF THE STRUCTURE UNTIL ALL PERMANENT STRUCTURAL ELEMENTS, INCLUDING SHEAR WALLS AND BRACING ARE ATTACHED AND CAPABLE OF SUPPORTING LOADS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION PROCEDURES.

   b. ALL SHOP AND FIELD CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS OR WELDS. ALL HIGH STRENGTH BOLTS AND NUTS SHALL BE CLEARLY MARKED AS REQUIRED BY AISC SPECIFICATIONS. CONNECTIONS MADE WITH UNMARKED BOLTS AND NUTS WILL BE REJECTED.

   c. ALL ANCHOR ROD EMBEDDED ENDS SHALL BE HEADED OR DOUBLE-NUTTED. HOOK BOLTS ARE NOT ALLOWED. ANCHOR RODS SHALL BE FURNISHED WITH A36 PLATE WASHERS ON TOP OF THE BASE PLATE. MINIMUM WASHER SIZE AND THICKNESS SHALL BE AS SHOWN IN TABLE 14-2 OF THE AISC MANUAL.

   d. EXCEPT FOR STEEL ENCASED IN CONCRETE OR SPRAY-ON FIREPROOFING, ALL STEEL SHALL BE CLEANED (SSPC-SP3 FOR INTERIOR EXPOSURE AND SSPC-SP6 FOR EXTERIOR EXPOSURE) AND PAINTED WITH AN APPROVED CORROSION RESISTANT PRIMER. MASK OUT AREAS TO BE FIELD WELDED, TOP FLANGES OF COMPOSITE BEAMS RECEIVING SHEAR STUD CONNECTORS, AREAS AROUND BOLT HOLES AT SLIP CRITICAL CONNECTIONS, ETC. TOUCH-UP ALL FIELD WELDS AND ABRADED AREAS WITH SHOP PRIMER. PRIMER SHALL BE COMPATIBLE WITH FINAL FINISHES. COORDINATE WITH ARCHITECT.

   e. ALL EXTERIOR STEEL TO BE HOT DIP GALVANIZE STRUCTURAL AND MISCELLANEOUS STEEL ACCORDING TO ASTM A123 AFTER FABRICATION. FILL VENT AND DRAIN HOLES THAT WILL BE EXPOSED IN THE FINISHED WORK, UNLESS INDICATED TO REMAIN AS WEEP HOLES, BY PLUGGING WITH ZINC SOLDER AND FILING SMOOTH. AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS AND ABRADED AREAS AND REPAIR GALVANIZING TO COMPLY WITH ASTM A780.

   f. THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS AND RECEIVE WRITTEN APPROVAL BEFORE ANY FIELD CORRECTIONS ARE MADE.

   g. NO CONNECTION SHALL CONSIST OF LESS THAN (2) 3/4" DIA. HIGH STRENGTH BOLTS OR WELDS DEVELOPING LESS THAN 16.3 KIPS (ASD).

   h. GAS CUTTING TORCHES SHALL NOT BE USED TO CORRECT FABRICATION ERRORS WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.

   i. NO OPENINGS IN BEAMS SHALL BE PERMITTED WITHOUT THE WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER.

   j. WELDING ELECTRODES, WELDING PROCESS, MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE IN ACCORDANCE WITH THE AISC AND AWS SPECIFICATIONS. ANY STRUCTURAL STEEL DAMAGED IN WELDING IS TO BE REPLACED OR ACCEPTABLY REINFORCED AS ACCEPTABLE TO THE STRUCTURAL ENGINEER.

   k. WELDERS SHALL HAVE CURRENT EVIDENCE OF PASSING THE APPROPRIATE AWS QUALIFICATION TESTS. THE ENGINEER MAY REQUEST SUCH EVIDENCE AT ANY TIME DURING THE PROJECT.

   l. UNLESS OTHERWISE NOTED, ALL BOLTS SHALL BE TIGHTENED TO THE "SNUG TIGHT" CONDITION DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH, RESISTANCE TO A SUITABLE NON-IMPACTING WRENCH, OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH. THE SNUG TIGHT CONDITION MUST ENSURE THAT ALL PLIES OF THE CONNECTED MATERIAL HAVE BEEN BROUGHT INTO FIRM CONTACT. PROVIDE WASHERS IN ACCORDANCE WITH THE RCSC SPECIFICATION.

   m. STEEL GRATING SHALL HAVE DEPTH AS SHOWN ON THE DRAWINGS. MANUFACTURER SHALL DESIGN GRATING FOR A UNIFORM LOAD OF 150 PSF OR CONCENTRATED LOAD OF 1,000 POUNDS (APPLIED OVER A ONE FOOT WIDTH) AT MID-SPAN, WHICHEVER PRODUCES MAXIMUM STRESSES. ALL GRATING SHALL BE GALVANIZED PER ASTM A525, CLASS G90.

   n. PROVIDE FRAMING FOR ALL ROOFTOP EQUIPMENT CURBS AND OPENINGS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND TYPICAL DETAILS.

   o. SPLICING STRUCTURAL MEMBERS WHERE NOT DETAILED ON THE DRAWINGS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.

4. INSPECTION AND TESTING
   a. THE OWNER WILL ENGAGE A TESTING AND INSPECTION AGENCY IN ACCORDANCE WITH THE SPECIAL INSPECTION SECTION.

   b. MINIMUM REQUIREMENTS:
      1) VISUALLY INSPECT ALL FILLET WELDS, BOLTED CONNECTIONS.
      2) EACH FULL PENETRATION BUTT OR GROOVE WELD AND 50% OF PARTIAL PENETRATION WELDS SHALL BE TESTED BY THE ULTRASONIC METHOD.
      3) 10% OF ALL FIELD FILLET WELDS IN PRIMARY CONNECTIONS AND MULTI-PASS WELDS SHALL BE TESTED BY THE MAGNETIC PARTICLE METHOD.
      4) TEST ANY WELD WHICH VISUAL EXAMINATION INDICATES AN UNUSUAL CONDITION AND/OR POOR QUALITY.
      5) WELDING INSPECTION AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH THE AWS CODE.

E. STEEL DECK

1. DESIGN STANDARDS
   a. LATEST EDITION OF THE STEEL DECK INSTITUTE (SDI) ROOF DECK DESIGN MANUAL AND FLOOR DECK DESIGN MANUAL.

   b. "STRUCTURAL WELDING CODE - SHEET STEEL", AWS D1.3

2. MATERIALS
   a. STEEL DECK UNITS AND ACCESSORIES SHALL BE FABRICATED FROM STEEL CONFORMING TO ASTM A653 OR ASTM A1008. THE STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI.

3. GENERAL
   a. DECKING SHALL MEET SDI'S MINIMUM SECTION PROPERTY REQUIREMENTS.

   b. ALL ROOF DECK AND ACCESSORIES SHALL BE GALVANIZED.

   c. EXCEPT WHERE NOTED ON THE PLANS, DECK SUPPLIER SHALL PROVIDE ALL ADDITIONAL FRAMING TO SUPPORT DECK AT OPENINGS THROUGH DECK AND ALL CLOSURE ANGLES, PLATES, POURSTOPS, END CLOSURES, ETC. WHERE REQUIRED TO RESULT IN A COMPLETE INSTALLATION.

   d. SHOP DRAWINGS: SHOW LOCATION OF DECK UNITS AND PANEL LAYOUT, ANCHORAGE DETAILS AND PATTERN, POURSTOPS AND CLOSURES, SUMP PANS, CUT OPENINGS AND ACCESSORIES, AND OTHER INFORMATION REQUIRED TO DESCRIBE A THOROUGH INSTALLATION.

F. SPECIAL INSPECTION

1. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

2. THE OWNER SHALL EMPLOY SPECIAL INSPECTORS TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THIS SECTION AND AS REQUIRED BY THE CODE. THE SPECIAL INSPECTORS SHALL BE QUALIFIED PERSONS COMPETENT FOR INSPECTION OF CONSTRUCTION AND CONSTRUCTION OPERATIONS REQUIRING SPECIAL INSPECTIONS, AND WHOSE QUALIFICATIONS SATISFY THE REQUIREMENTS OF THE LOCAL BUILDING OFFICIAL OF THE JURISDICTION.

3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE SPECIAL INSPECTOR(S) FOR ITEMS REQUIRING SPECIAL INSPECTIONS. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE SITE, ADEQUATE NOTICE FOR SCHEDULING AND ACCESS TO APPROVED PLANS IN ORDER TO GIVE THE SPECIAL INSPECTOR(S) TIME TO PREPARE FOR INSPECTIONS.

4. SPECIAL INSPECTIONS REPORTS SHALL BE FURNISHED TO THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, AND BUILDING CODE OFFICIAL.
   a. WORK IN VARIANCE WITH THE CONTRACT DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTOR FOR TIMELY CORRECTIVE ACTION.

   b. WORK REMAINING IN VARIANCE WITH THE CONTRACT DOCUMENTS, OR WORK COVERED WITH OTHER MATERIALS PRIOR TO THE SPECIAL INSPECTOR'S CONFIRMATION, SHALL BE REPORTED TO THE ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR, AND BUILDING CODE OFFICIAL.

   c. IF THE CONTRACTOR COVERS UNINSPECTED WORK, REMOVAL OF SUCH MATERIALS AT THE CONTRACTOR'S COST WILL BE REQUIRED IN ORDER FOR INSPECTIONS TO BE PROPERLY COMPLETED.

   d. WHEN INSPECTIONS ARE COMPLETE, THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT STATING THAT STRUCTURAL WORK WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, COMPLETED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

5. REQUIRED SPECIAL INSPECTIONS AND REQUIRED FREQUENCY ARE DESIGNATED IN THE SCHEDULE BELOW.

SPECIAL INSPECTION SCHEDULE

DESCRIPTION	EXTENT	REFERENCED STANDARD
STRUCTURAL STEEL FABRICATION	PERIODIC	AISC
STRUCTURAL STEEL INSTALLATION	PERIODIC	AISC
HIGH-STRENGTH BOLT INSTALLATION, FIELD AND SHOP	PERIODIC	AISC
WELDING, FIELD AND SHOP	PERIODIC	AISC, AWS

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2021.12.17

REVISION	DATE	BY
1	11/17/23	EHS

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GENERAL STRUCTURAL NOTES
PUCILLO GYMNASIUM
ROOF TOP UNITS
MILLERSVILLE UNIVERSITY
MILLERSVILLE PA 17551

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