GENERAL NOTES:

1. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS, IF APPLICABLE, ARE FULLY COMPLIMENTARY AND SUPPLEMENTAL TO EACH OTHER AND SHALL BE TAKEN AS A WHOLE. STRUCTURAL WORK PERFORMED UNDER THESE DRAWINGS AND SPECIFICATIONS SHALL BE COORDINATED WITH EACH INDIVIDUAL CONTRACTOR. INCONSISTENCIES BETWEEN THE STRUCTURAL DRAWINGS AND THE SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/ARCHITECT PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

2. ALL STANDARDS IDENTIFIED IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL BE BASED ON THE PUBLISHED EDITION OF THE STANDARD REFERENCED IN THE BUILDING CODE IN EFFECT FOR THIS PROJECT.

3. THE CONTRACTOR SHALL COORDINATE THE STRUCTURAL WORK WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SITE DRAWINGS. REFER TO THESE DRAWINGS FOR DIMENSIONS, LOCATIONS AND QUANTITIES OF ALL SHAFTS, INSERTS, OPENINGS, SLEEVES, DEPRESSIONS, ATTACHMENTS AND ALL OTHER DETAILS NOT SHOWN IN THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL NOTIFY THE OWNER/ARCHITECT OF ANY DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS FOR RESOLUTION PRIOR TO PROCEEDING WITH THE WORK.

4. THE CONTRACTOR SHALL MAKE NO DEVIATION FROM THE STRUCTURAL DRAWINGS WITHOUT THE WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD (SER).

5. SECTIONS AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE CONSIDERED "TYPICAL" FOR ALL SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE.

6. ALL REQUESTS FOR INFORMATION SHALL BE COORDINATED THROUGH THE OWNER/ARCHITECT.

7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS, NEW AND EXISTING, BY MEASUREMENTS AND SURVEYS AT THE PROJECT SITE PRIOR TO SUBMITTAL OF THE SHOP DRAWINGS. THE CONTRACTOR SHALL TAKE ALL MEASUREMENTS NECESSARY TO VERIFY CONFORMANCE WITH ALL THE CONTRACT DRAWINGS. REPORT ANY INCONSISTENCIES IN WRITING TO THE OWNER/ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

8. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS FOR SUCCESSFUL COMPLETION OF THIS PROJECT. ALL FIELDWORK SHALL BE COORDINATED AND CONTINUOUSLY SUPERVISED BY THE CONTRACTOR.

9. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DOES NOT INDICATE THE METHOD OF CONSTRUCTION. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE ONLY AFTER THE BUILDING IS COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND SAFETY PROGRAMS DURING THE CONSTRUCTION OPERATIONS OF THE PROJECT. THIS INCLUDES THE DESIGN, INSTALLATION AND REMOVAL OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS TO COMPLETE THE PROJECT. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT. ANY FAILURE TO MAKE PROPER AND ADEQUATE PROVISIONS FOR STRESSES AND STABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION SHALL BE THE SOLE RISK AND RESPONSIBILITY OF THE CONTRACTOR.

10. ALL WORK IS TO BE COMPLETED IN ACCORDANCE WITH THE REFERENCED BUILDING CODE, WRITTEN SPECIFICATIONS, AND THE STRUCTURAL DRAWINGS. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE IN THE STATE WHERE THIS PROJECT IS LOCATED.

11. CONTRACTOR TO ADHERE TO ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL LAWS, REGULATIONS AND ORDINANCES, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA).

SUBMITTAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS, INCLUDING ANY ADDENDA ITEMS, TO DISTRIBUTE TO ALL SUBCONTRACTORS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.

2. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK. THE SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE EDITION OF THE RESPECTIVE TRADES' CODES OF STANDARD PRACTICE IN EFFECT FOR THIS PROJECT. THE CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWING SUBMITTALS PRIOR TO FORWARDING TO THE ARCHITECT. ALL COPIES OF SHOP DRAWINGS SHALL BEAR A STAMP FROM THE CONTRACTOR VERIFYING THEY HAVE REVIEWED AND APPROVED THE SHOP DRAWINGS FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS NOT BEARING THE CONTRACTOR'S APPROVAL STAMP WILL NOT BE REVIEWED AND SHALL BE RETURNED "NOT REVIEWED." NO PERFORMANCE OF THE WORK INCLUDING, BUT NOT LIMITED TO, DEMOLITION OF EXISTING STRUCTURE, OR FABRICATION OR ERECTION OF NEW STRUCTURAL ELEMENTS, SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD (SER).

3. SUBMITTALS SHALL INCLUDE THE DATE AND ISSUE DESCRIPTION OF THE ARCHITECTURAL AND STRUCTURAL REFERENCE DRAWINGS USED TO PREPARE THEM. SUBMITTALS NOT PREPARED ACCORDING TO THE LATEST ISSUE OF THE CONTRACT DOCUMENTS, OR NOT INDICATING THE REFERENCE DRAWINGS DATE AND ISSUE DESCRIPTION, WILL BE RETURNED "NOT REVIEWED". CONTRACT DRAWINGS SHALL NOT BE REPRODUCED, IN WHOLE OR IN PART, BY THE CONTRACTORS OR THEIR AGENTS FOR THE PREPARATION AND DEVELOPMENT OF SHOP DRAWINGS.

4. CONTRACTOR SHALL ISSUE A SUBMITTAL SCHEDULE AT LEAST 30 DAYS PRIOR TO RECEIPT OF THE FIRST SUBMITTAL. SUBMITTAL SCHEDULE SHALL IDENTIFY THE DATE THAT EACH SUBMITTAL WILL BE ISSUED TO THE STRUCTURAL ENGINEER FOR THEIR REVIEW. FAILURE TO SUBMIT THIS SCHEDULE OR TO ISSUE SUBMITTAL ON THE DATES SPECIFIED, MAY IMPACT THE DURATION OF THE SER'S REVIEW.

5. THE CONTRACTOR SHALL SUBMIT ONE ELECTRONIC (PDF) COPY OF ALL SUBMITTALS TO THE SER FOR REVIEW. COPIES SHALL BE CLEAR AND LEGIBLE. THE ELECTRONIC COPY WILL BE MARKED UP AND RETURNED TO THE CONTRACTOR. REFER TO THE PROJECT DRAWINGS AND SPECIFICATIONS FOR SUBMITTALS REQUIRED.

6. THE CONTRACTOR SHALL NOT BE RELIEVED OF ANY RESPONSIBILITY FOR ANY DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AS A RESULT OF THE SER'S REVIEW OF THE SUBMITTALS, UNLESS THE CONTRACTOR HAS SPECIFICALLY NOTIFIED THE SER IN WRITING OF THE DEVIATION AND THE SER HAS PROVIDED WRITTEN ACCEPTANCE OF THE DEVIATION. THE CONTRACTOR IS REQUIRED TO CLEARLY IDENTIFY ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS AND INCLUDE REASON FOR DEVIATION WITHIN THE SUBMITTAL.

7. MATERIALS REQUIRED BY THE CONTRACT DOCUMENTS AND OMITTED FROM THE SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR FROM FURNISHING THESE MATERIALS REGARDLESS OF WHETHER THE SUBMITTALS HAVE BEEN REVIEWED.

8. THE CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN ANY SUBMITTAL BY THE SER'S REVIEW THEREOF.

9. SUBMITTALS REVIEWED BY THE SER SHALL BE STAMPED AS IDENTIFIED BELOW:

   A. REVIEWED-NO EXCEPTIONS: MATERIALS, SIZES, GENERAL ARRANGEMENT AND DETAILS SHOWN APPEAR TO BE IN GENERAL CONFORMANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS.

   B. REVIEWED-EXCEPTIONS NOTED: INCLUSION OF CORRECTIONS NOTED WILL RESULT IN SUBMITTAL BEING IN GENERAL CONFORMANCE WITH THE MATERIALS, SIZES, GENERAL ARRANGEMENT AND DETAILS NOTED IN THE CONTRACT DOCUMENTS. RE-SUBMITTAL IS NOT REQUIRED. ALL CORRECTIONS SHALL BE CONSIDERED FULLY UNDERSTOOD UNLESS SPECIFICALLY IDENTIFIED AND COORDINATED WITH THE SER.

   C. REVISE & RESUBMIT: INCLUSION OF CORRECTIONS NOTED WILL RESULT IN SUBMITTAL BEING IN GENERAL CONFORMANCE WITH THE MATERIALS, SIZES, GENERAL ARRANGEMENT AND DETAILS NOTED IN THE CONTRACT DOCUMENTS. PORTIONS OF THE SUBMITTAL SPECIFICALLY REQUESTED IN WRITING BY THE SER SHALL BE RE-SUBMITTED FOR REVIEW PRIOR TO FABRICATION, PURCHASE, OR USE.

   D. REJECTED: FABRICATION, PURCHASE, OR USE SHALL NOT OCCUR PRIOR TO THE SUBMITTAL BEING REVISED, RE-SUBMITTED, AND REVIEWED BY THE SER AND ALL OTHER PARTIES INVOLVED.

10. RE-SUBMITTED SHOP DRAWINGS WILL NOT BE REVIEWED UNLESS ANY AND ALL REVISIONS ARE CLOUDED. ONLY CLOUDED ITEMS WILL BE REVIEWED.

FOUNDATIONS:

1. PREPARE AREAS OF THE SITE SUPPORTING STRUCTURE BY REMOVING TOPSOIL, EXISTING FILL, ORGANIC MATERIAL, OR FROZEN, WET, SOFT, LOOSE OR OTHERWISE UNSUITABLE MATERIALS.

2. PROOFROLL THE EXPOSED SUBGRADE WITH SUITABLE EQUIPMENT APPROVED BY THE OWNER'S TESTING AGENCY TO DETERMINE IF ANY POCKETS OF SOFT, UNSUITABLE MATERIAL EXISTS BENEATH THE EXPOSED SUBGRADE. REMOVE ANY UNSUITABLE MATERIAL ENCOUNTERED AND REPLACE WITH A WELL-GRADED GRANULAR ENGINEERED FILL MATERIAL.

3. PLACEMENT AND COMPACTION OF ENGINEERED FILL SHALL BE OVERSEEN BY THE OWNER'S TESTING AGENCY. PLACE FILL MATERIAL IN LAYERS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS. MECHANICALLY COMPACT EACH LAYER TO AT LEAST THE REQUIRED MINIMUM DRY DENSITY. REQUIREMENTS FOR MATERIALS, COMPACTION METHODS AND FIELD QUALITY CONTROL ARE OUTLINED IN THE GEOTECHNICAL ENGINEERING REPORT.

4. FOOTINGS SHALL BE SUPPORTED ON FIRM, UNDISTURBED NATURAL SOILS. THE SOIL MATERIAL SHALL MEET THE REQUIRED MINIMUM SOIL BEARING PRESSURE LISTED UNDER THE "DESIGN INFORMATION" SECTION OF THE DRAWINGS . IF UNSUITIBLE MATERIAL IS ENCOUNTERED, REMOVE AND REPLACE WITH A SUITABLE. COMPACTABLE ENGINEERED FILL MATERIAL AS RECOMMENDED BY THE OWNER'S TESTING AGENCY TO THE DESIRED FOOTING BEARING ELEVATION.

5. PLACE FOOTINGS THE SAME DAY EXCAVATIONS ARE OPENED. IF THIS IS NOT POSSIBLE, ADEQUATELY PROTECT THE EXPOSED MATERIAL IN THE BASES OF THE FOOTING EXCAVATIONS FROM ANY DETRIMENTAL CHANGE IN CONDITION SUCH AS FROM DISTURBANCE, RAIN OR FREEZING. SURFACE RUNOFF SHALL NOT BE ALLOWED TO ENTER THE EXCAVATIONS.

6. STRUCTURAL SLABS AND SLABS-ON-GROUND WHICH PROVIDE TOP AND BOTTOM SUPPORT FOR CONCRETE WALLS RETAINING EARTH MUST BE IN PLACE AND HAVE REACHED 70% OF THEIR REQUIRED 28 DAY COMPRESSIVE STRENGTH BEFORE ANY BACKFILLING OPTIONS BEGIN. IF THE CONTRACTOR CHOOSES TO BACKFILL WALLS PRIOR TO THE INSTALLATION OF THE SLABS, CONTRACTOR MUST PROVIDE WALL SUPPORT BRACING AND IS RESPONSIBLE FOR THE DESIGN, MATERIAL AND LABOR OF SUCH INSTALLATION.

7. CONCRETE WALLS RETAINING EARTH MUST HAVE REACHED 100% OF THEIR REQUIRED 28 DAY COMPRESSIVE STRENGTH BEFORE BACKFILLING OPERATIONS BEGIN.

8. SIMULTANEOUSLY BACKFILL EACH SIDE OF CONCRETE WALLS WITH EARTH ON BOTH SIDES TO PLUS OR MINUS TWO FEET.

9. BACKFILL PLACED AGAINST CONCRETE WALLS SHALL BE A WELL-GRADED GRANULAR MATERIAL. REQUIREMENTS FOR MATERIALS AND COMPACTION METHODS ARE OUTLINED IN THE GEOTECHNICAL ENGINEERING INVESTIGATION REPORT.

10. FOR INFORMATION REGARDING SUBSURFACE CONDITIONS, REFER TO GEOTECHNICAL ENGINEERING INVESTIGATION REPORT.

CONCRETE:

1. CONCRETE WORK SHALL CONFORM TO ACI 301, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE IN BUILDINGS," AND ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE." HOT AND COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305R AND 306R, RESPECTIVELY.

2. CEMENT SHALL CONFORM TO ASTM C150 TYPE I OR II.

3. AGGREGATES SHALL CONFORM TO ASTM C33. MAXIMUM SIZE AGGREGATE SHALL BE 3/4" NOMINAL AT FOUNDATIONS, UNLESS NOTED OTHERWISE.

4. PROPORTION CONCRETE MIX TO PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO THE FORMS AND AROUND REINFORCEMENT BY THE METHODS OF PLACEMENT AND CONSILIDATION TO BE EMPLOYED, WITHOUT SEGREGATION OR EXCESSIVE BLEEDING

5. PROVIDE CONCRETE MIX DESIGNS INCORPORATING THE FOLLOWING REQUIREMENTS:

   A. FOOTINGS:

COMPRESSIVE STRENGTH AT 28 DAYS:	3000 PSI
MINIMUM CEMENT CONTENT:	423 LB/CU YD
MAXIMUM WATER CEMENT RATIO:	0.58
AIR ENTRAINMENT:	OPTIONAL
WATER-REDUCING ADMIXTURE REQUIRED	

   B. WALLS/PIERS:

COMPRESSIVE STRENGTH AT 28 DAYS:	4000 PSI
MINIMUM CEMENT CONTENT:	517 LB/CU YD
MAXIMUM WATER CEMENT RATIO:	0.48
AIR ENTRAINMENT:	4% TO 6%
MID-RANGE WATER-REDUCING ADMIXTURE REQUIRED	

   C. SLABS-ON-GROUND:

COMPRESSIVE STRENGTH AT 28 DAYS:	4000 PSI
MINIMUM CEMENT CONTENT:	517 LB/CU YD
MAXIMUM WATER CEMENT RATIO:	0.48
AIR ENTRAINMENT:	NONE
MID-RANGE WATER-REDUCING ADMIXTURE REQUIRED	
SYNTHETIC FIBERS REQUIRED	

6. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

7. CONCRETE MIX DURATION TIMES SHALL BE LIMITED TO LESS THAN 90 MINUTES, WITHOUT EXCEPTION FOR ANY REASON.

8. MINIMUM PROTECTIVE COVER OVER REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

A. SURFACES CAST AND PERMANENTLY IN CONTACT WITH EARTH:	3"
B. FORMED SURFACES EXPOSED TO EARTH AND WEATHER:	
#5 BARS AND SMALLER:	1-1/2"
#6 BARS AND LARGER:	2"
C. FORMED SURFACES NOT EXPOSED TO EARTH AND WEATHER:	
#11 BARS AND SMALLER FOR SLABS, WALL & JOISTS:	3/4"
ALL REINFORCEMENT OF BEAMS, GIRDERS & COLUMNS:	1-1/2"

9. PROVIDE SUPPLEMENTAL REINFORCEMENT AROUND ALL OPENINGS IN CONCRETE SLABS AND WALLS AS INDICATED IN THE TYPICAL DETAILS.

10. ALL EMBEDED ITEMS INTO THE CONCRETE SHALL BE INSTALLED PRIOR TO THE CONCRETE POUR. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES TO ENSURE THE CORRECT POSITION OF THE EMBEDMENTS. "WET SETTING" OF EMBEDMENTS (INCLUDING ANCHOR RODS) INTO THE CONCETE IS PROHIBITED.

11. COORDINATE THE INSTALLATION OF ALL EMBEDED ITEMS IN THE CONCRETE SUCH AS PIPES, CONDUITS, PLATES, ETC. WITH THE PLACEMENT OF REINFORCEMENT TO ENSURE THAT THE REINFORCEMENT IS IN THE PROPER POSITION AND NOT CUT OR DISPLACED BY THE EMBEDED ITEMS.

12. PROVIDE SLEEVES WHERE PIPES PASS THOUGH CONCRETE WALLS AND SLABS. ALL SLEEVES SHALL BE SPECIFIED BY THE MEP CONTRACTOR. COORDINATE LOCATIONS WITH MEP DRAWINGS.

13. REFER TO TYPICAL DETAILS FOR ALL CONSTRUCTION AND CONTRACTION JOINTS IN CONCRETE FOR INFORMATION AND LIMITATIONS.

14. SLAB THICKNESSES INDICATED ON THE STRUCTURAL DRAWINGS ARE TO BE CONSIDERED MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR VERTICAL DEFLECTIONS, SUBGRADE FLUCTUATIONS AND TO OBTAIN THE SPECIFIED SLAB ELEVATION INDICATED.

15. FINISHING OF FLOOR SLABS: PROVIDE A TROWEL FINISH AFTER SCREEDING AND FLOATING OPERATIONS HAVE BEEN COMPLETED.

REINFORCING STEEL:

1. PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL IN ACCORDANCE WITH THE ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318), UNLESS OTHERWISE INDICATED.

2. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS. WELDING REINFORCEMENT SHALL NOT BE PERMITTED.

3. REINFORCING STEEL SHALL BE SUPPORTED AND SECURED AGAINST DISPLACEMENT IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE'S "MANUAL OF STANDARD PRACTICE".

4. DETAILS OF REINFORCING STEEL FABRICATION AND PLACEMENT SHALL CONFORM TO ACI "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315) AND "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" (ACI 315R) UNLESS OTHERWISE INDICATED.

5. REINFORCING STEEL BENDS, HOOKS AND LAP SPLICES SHALL CONFORM TO THE ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) UNLESS OTHERWISE INDICATED.

6. PROVIDE FOOTING DOWELS FOR VERTICAL WALL REINFORCEMENT. DOWELS SHALL BE THE SAME SIZE AND SPACING AS THE VERTICAL WALL REINFORCEMENT, UNLESS NOTED OTHERWISE, WITH LAP SPLICES AS INDICATED ON THE APPLICABLE SECTIONS. INSTALL DOWELS IN THE FOOTING FORMS BEFORE CONCRETE IS PLACED, SUPPORTING AND TYING THEM SECURLY IN POSITION. DO NOT STICK DOWELS INTO FOOTINGS AFTER CONCRETE IS PLACED.

7. FIELD BENDING OF REINFORCING STEEL IS PROHIBITED UNLESS INDICATED OTHERWISE ON DETAILS.

8. PROVIDE STANDEES FOR THE SUPPORT OF TOP REINFORCEMENT FOR FOOTINGS AND MATS.

9. PROVIDE PLASTIC, SNAP-ON SPACE WHEELS TO MAINTAIN REQUIRED CONCRETE COVER FOR VERTICAL WALL REINFORCEMENT.

10. NOTIFY THE STRUCTURAL ENGINEER OF RECORD AT LEAST 48 HOURS IN ADVANCE OF PLACING CONCRETE FOR REVIEW OF THE REINFORCING STEEL PLACEMENT. DO NOT CAST CONCRETE UNTIL THE REVIEW HAS BEEN MADE OR WAIVED.

11. DO NOT CUT OR DISPLACE ANY REINFORCING STEEL TO ACCOMMODATE THE INSTALLATION OF ANY EMBEDDED ITEMS WITHOUT WRITTEN APPROVAL OF THE SER.

12. ALL ITEMS TO BE EMBEDDED INTO CONCRETE SHALL BE INSTALLED PRIOR TO PLACEMENT OF CONCRETE. PROVIDE ADDITIONAL REINFORCEMENT AND/OR TEMPLATES AS REQUIRED TO ENSURE THE CORRECT POSITION OF EMBEDMENTS. "WET SETTING" OF EMBEDMENTS (INCLUDING ANCHOR BOLTS) INTO CONCRETE IS PROHIBITED

COLD-FORMED STEEL FRAMING:

1. THE EXTENT OF THE WORK FOR THE COLD FORMED STEEL FRAMING IS DETAILED ON THE ARCHITECTURAL DRAWINGS. THESE DRAWINGS AND NOTES SHALL BE WORKED IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND THE PROJECT SPECIFICATIONS.

2. PROVIDE MINIMUM FRAMING MEMBERS AS SHOWN ON DRAWINGS. MEMBER TYPES AND SIZES SHOWN ON THE DRAWINGS FOLLOW THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) STANDARDS. ANY MANUFACTURER WHOSE PRODUCT GEOMETRIES MEET OR EXCEED SSMA STANDARDS ARE ACCEPTABLE.

3. ALL COLD FORMED FRAMING MEMBERS SHALL BE MANUFACTURED FROM STEEL THAT MEETS THE REQUIREMENTS OF AISI SPECIFICATIONS, LATEST EDITION.

4. PROVIDE COLD FORMED MEMBERS 54 MILS AND HEAVIER FORMED FROM ASTM A653 GRA A.: 50 STEEL. PROVIDE MEMBERS 43 MILS AND LIGHTER FORMED FROM ASTM A653 GRA B.: 33. HOT DIP GALVANIZE ALL MEMBERS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

5. C. AT LOAD-BEARING WALLS, SQUARELY AND TIGHTLY SEAT STUDS AGAINST WEBS OF TOP AND D.OTTOM TRACKS. PROVIDE AT LEAST 10" OF UNPUNCHED STEEL AT BEARING POINE.S. FASTEN BOTH FLANGES OF STUDS TO TOP AND BOTTOM TRACK.

6. USE A MINIMUM OF THREE STUDS AT THE CORNER OF ALL EXTERIOR WALLS.

7. COLD FORMED STEEL WALL FRAMING USED AS BACK-UP FOR MASONRY OR BRICK VENEER SHALL BE DESIGNED FOR A MAXIMUM DEFLECTION EQUAL TO STUD LENGTH DIVIDED BY 600. ALL OTHER WALL FRAMING SHALL BE DESIGNED FOR A MAXIMUM DEFLECTION EQUAL TO STUD LENGTH DIVIDED BY 360.

8. CONNECT COLD FORMED STEEL MEMBERS WITH A MINIMUM OF TWO #10-16 SCREWS OR EQUIVALENT WELDS UNLESS NOTED OTHERWISE.

9. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S PRINTED OR WRITTEN INSTRUCTIONS AND RECOMMENDATIONS.

10. FIELD CUTTING OF COLD FORMED FRAMING MEMBERS MAY BE DONE BY SAWING OR SHEARING. TORCH CUTTING OF COLD FORMED MEMBERS IS NOT PERMITTED.

11. SPLICING OF STRUCTURAL FRAMING MEMBERS (STUDS, JOISTS) IS NOT PERMITTED.

12. TEMPORARY BRACING IS THE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE TEMPORARY BRACING AS REQUIRED TO MAINTAIN A PLUMB STRUCTURE UNTIL ERECTION IS COMPLETE. DO NOT REMOVE BRACING UNTIL WORK IS PERMANENTLY STABILIZED.

13. ALL DIAGONAL STRAP BRACING SHALL BE OF A FLAT STOCK. MATERIAL FROM A COILED STOCK IS NOT ACCEPTABLE FOR DIAGONAL STRAP BRACING AND WILL BE CAUSE FOR REJECTION.

14. WALL STUD BRIDGING SHALL BE ATTACHED IN A MANNER TO PREVENT STUD ROTATION. BRIDGING ROWS SHALL NOT EXCEED 4'-0" o.c. UNLESS NOTED OTHERWISE.

15. FASTENER PENETRATION THROUGH JOINED MATERIALS SHALL NOT BE LESS THAN THREE EXPOSED THREADS. MINIMUM SPACING AND EDGE DISTANCE OF SCREW FASTENERS SHALL NOT BE LESS THAN 3/4".

16. ALL WELDED CONNECTIONS ARE TO BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF AWS D1.3, SPECIFICATIONS FOR WELDING SHEET STEEL IN STRUCTURES. REFER TO AWS D19.0, WELDING ZINC COATED STEEL AND AISI STANDARD Z49.1 FOR INFORMATION REGARDING SAFE WELDING PROCEDURES.

DESIGN INFORMATION:

1. DESIGN CODE INFORMATION:
   A. 2009 INTERNATIONAL BUILDING CODE (2009 IBC)
   B. ASCE 7-05 "MINIMUM DESIGN LOADS FOR BUILDINGS AND STRUCTURES"

2. GEOTECHNICAL DESIGN CRITERIA:
   A. FOUNDATION DESIGN IS BASED ON RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL ENGINEERING REPORT PROVIDED BY "S.W. COLE ENGINEERING, INC", PROJECT NO. 04-0238, DATED APRIL 1, 2004.

   B. FOUNDATION DESIGN BEARING CAPACITY IS BASED ON USING THE FOLLOWING ALLOWABLE NET SOIL BEARING PRESSURES:
   - COLUMN FOOTINGS: 2500 PSF
   - CONTINOUS WALL FOOTINGS: 2500 PSF

   C. SEISMIC DESIGN SITE CLASSIFICATION: SITE CLASS D

   D. NOTIFY THE STRUCTURAL ENGINEER OF RECORD (SER) IF UNSUITABLE MATERIALS ARE ENCOUNTERED BEFORE PROCEEDING WITH THE AFFECTED AREA OF WORK.

3. DESIGN LOADS:
   A. DEAD LOADS: ESTIMATED SELF-WEIGHT OF STRUCTURE AND ANY COMPONENTS OR FIXTURES CONSIDERED PERMANENT.

   B. LIVE LOADS:

WAREHOUSE:	100 PSF

   C. SNOW LOAD:

DESIGN GROUND SNOW LOAD, Pg	60 PSF
TERRAIN CATEGORY:	B
SNOW OCCUPANCY CATEGORY:	II
SNOW LOAD IMPORTANCE FACTOR, Is:	1.0
SNOW EXPOSURE FACTOR, Ce:	1.0
THERMAL FACTOR, Ct:	1.0
DESIGN FLAT-ROOF SNOW LOAD	42 PSF

   D. WIND LOADS:

WIND OCCUPANCY CATEGORY:	II
BASIC WIND SPEED (3-SEC GUST):	100 MPH
WIND IMPORTANCE FACTOR, Iw:	1.0
WIND EXPOSURE:	C
WIND DIRECTIONALITY FACTOR, Kd:	0.85
TOPOGRAPHIC FACTOR, Kzt:	1.0
ENCLOSURE CLASSIFICATION:	ENCLOSED
INTERNAL PRESSURE COEFFICIENT:	+/- 0.18

   E. SEISMIC LOADS:

SEISMIC OCCUPANCY CATEGORY:	II
SITE CLASSIFICATION:	D
SEISMIC IMPORTANCE FACTOR, Ie:	1.0
SHORT PERIOD ACCELERATION, Ss (Sds):	0.314 (0.324)
1 SECOND PERIOD ACCELERATION, S1 (Sd1):	0.077 (0.123)
SEISMIC DESIGN CATEGORY:	B

   SEISMIC ANALYSIS PROCEDURE:
   - STATIC EQUIVALENT LATERAL FORCE METHOD

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Key Plan

Sheet Issue / Revision

No.	Date	Description
1	04/27/17	Permit Set

Seal/Signature

STATE OF MAINE
MIGUEL BETANCOURT
No. 14038
LICENSED
PROFESSIONAL ENGINEER

Project

UNIT 5 - LOADING DOCK
1039 RIVERSIDE STREET
PORTLAND, MAINE

Client

HardyPond
Construction
Portland, Maine

Title

GENERAL NOTES

Project Number	17068-0
Drawn By	MB
Checked By	MB

S-001

Scale: As indicated