GENERAL NOTES

- 1. THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE
 SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO
 GENERAL NOTES. INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE
 SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER
 PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- 2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- 3. ALL DIMENSIONS, EXISTING CONDITIONS, AND AS—BUILT CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- 4. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE ONLY AFTER THE STRUCTURAL WORK CONTAINED IN THE S— DRAWINGS IS COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- 5. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AS DETERMINED BY THE STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER RESERVES THE RIGHT TO INTERPRET DETAILS TO ADDRESS OTHER PROJECT CONDITIONS.
- 6. PROVIDE AND INSTALL NECESSARY MATERIAL TO CONNECT ELEVATOR SUPPORT BEAMS AND GUIDE RAILS. LOCATION AND SIZE OF MEMBERS AND ANY INSERTS REQUIRED SHALL BE DETERMINED BY THE ELEVATOR MANUFACTURER.
- 7. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK, INCLUDING DESCRIPTION OF SHORING, AND CONSTRUCTION METHODS AND SEQUENCING WHERE APPLICABLE. 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 ENGINEER. FOR SHOP DRAWINGS AND SUBMITTALS REQUIRED, REFERENCE THE PROJECT SPECIFICATIONS.
- 8. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- 9. IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE (2006 EDITION, SECTION 1704.1), A STATEMENT OF SPECIAL INSPECTIONS IS REQUIRED AS A CONDITION FOR PERMIT ISSUANCE BY THE LOCAL CODE OFFICIAL. THIS STATEMENT SHALL INCLUDE A COMPLETE LIST OF MATERIALS AND WORK REQUIRING SPECIAL INSPECTIONS, THE INSPECTIONS TO BE PERFORMED AND A LIST OF THE INDIVIDUALS, APPROVED AGENCIES AND FIRMS INTENDED TO BE RETAINED FOR CONDUCTING SUCH
- 10. REFERENCE THE PROJECT SPECIFICATIONS FOR ALL TESTING REQUIREMENTS.

DESIGN LOADS

RETAIL:

- BUILDING CODE: INTERNATIONAL BUILDING CODE, 2006 EDITION ASCE 7—05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- 2. DESIGN FLOOR LIVE LOADS (REDUCTIONS ARE UTILIZED PER CODE CRITERIA)

 PASSENGER CAR PARKING: 40 PSF

 OFFICES: 50 PSF + 20 PSF PARTITION ALLOWANCE

 CORRIDORS ABOVE FIRST FLOOR: 80 PSF

100 PSF

- 3. DESIGN ROOF SNOW LOAD:
 GROUND SNOW LOAD (Pg):
 SNOW EXPOSURE FACTOR (Ce):
 SNOW LOAD IMPORTANCE FACTOR (Is):
 SNOW LOAD THERMAL FACTOR (Ct):
 1.1
 FLAT ROOF SNOW LOAD (PF):
 46 PSF + DRIFT
- 4. DESIGN WIND LOAD:
 BASIC WIND SPEED: 100 MPH
 WIND LOAD IMPORTANCE FACTOR (Iw): 1.0
 WIND EXPOSURE: C
 INTERNAL PRESSURE COEFFICIENT: ±0.18
 COMPONENTS & CLADDING LOADS PER ASCE 7-05
- 5. DESIGN SEISMIC LOADS:
 EQUIVALENT LATERAL FORCE PROCEDURE
 OCCUPANCY CATEGORY: II PER IBC TABLE 1604.5
 SEISMIC IMPORTANCE FACTOR (Ie): 1.00
 MAPPED SPECTRAL RESPONSE ACCELERATIONS:
 Ss: 0.3142
 S1: 0.0769
 SEISMIC SITE CLASS: E
- SPECTRAL RESPONSE COEFFICIENTS: Sds: 0.481 Sd1: 0.179
- SEISMIC DESIGN CATEGORY: C
 BASIC STRUCTURAL SYSTEM: BUILDING FRAME SYSTEM
 BASIC SEISMIC FORCE RESISTING SYSTEM:
 SPECIAL STEEL CONCENTRICALLY BRACED FRAMES
 STEEL ECCENTRICALLY BRACED FRAMES, NON-MOMENT FRAMES
- INTERMEDIATE PRECAST SHEARWALLS
 RESPONSE MODIFICATION FACTOR (R):, X: 5.0
 Y: 5.0
 SEISMIC RESPONSE COEFFICIENT (Cs), X: 0.0425
 Y: 0.0425

AT COLUMNS AWAY FROM LINKS

FOUNDATION NOTES

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED "EXPLORATION AND GEOTECHNICAL SERVICES, PROPOSED OFFICE BUILDING AND PARKING GARAGE, PREBLE STREET AND MARGINAL WAY, PORTLAND, MAINE" PREPARED BY S.W. COLE ENGINEERING, INC., DATED MAY 17, 2006, WITH A SUPPLEMENT DATED FEB 16, 2007. THE RECOMMENDATIONS OF THE REPORTS ARE PART OF THIS WORK. REFER TO THE REPORTS FOR SPECIFIC RECOMMENDATIONS,

PILE SUPPORTED FOUNDATION NOTES:

- 1. DESIGN BUILD PERFORMANCE DESIGN: THE PILE DESIGN FOR THIS PROJECT IS TO BE DESIGNED BY THE PILE SUBCONTRACTOR. PILE SUBMITTAL SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. PILE NET ALLOWABLE AXIAL CAPACITY 250 KIPS (125 TON) AFTER CONSIDERING PILE DOWN DRAG FROM SITE SOIL SUBSIDENCE. A MINIMUM FACTOR OF SAFETY OF 2.0 SHALL BE USED WITH ULTIMATE CAPACITY.
- 2. CONTACTOR SHALL SUBMIT PROPOSED PILE HAMMER AND ENERGY REQUIREMENTS FOR REVIEW BY THE GEOTECHNICAL ENGINEER. DRIVING SHALL BE MONITORED BY A QUALIFIED GEOTECHNICAL ENGINEER TO ENSURE DRIVING CRITERIA IS REACHED.
- 3. ALL PILES SHALL BE DRIVEN USING POINTS TO LIMIT PILE DAMAGE AND PREVENT TIP KICK OUT DURING DRIVING WHEN REQUIRED BY DESIGN BUILD SYSTEM.
- 4. PILE LENGTHS SHALL BE ESTIMATED BASED ON BORING INFORMATION PROVIDED IN THE GEOTECHNICAL ENGINEERING REPORT.
- 5. CONTRACTOR SHALL VERIFY UTILITY LOCATIONS, AND COORDINATE WITH OWNER'S REPRESENTATIVE FOR PILE LOCATIONS, UTILITY LOCATIONS, BUILDING LOCATIONS, AND ANY INTERFERENCE
- 6. PILE SPLICES (IF APPLICABLE) SHALL BE DESIGNED AND CONSTRUCTED TO MAINTAIN ALIGNMENT AND POSITION OF PILE SECTIONS AND SHALL DEVELOP THE FULL CAPACITY OF THE PILE IN COMPRESSION, TENSION, BENDING AND SHEAR. WELDED PILE SPLICES SHALL BE FULL PENETRATION WELDS WITH ETOXX ELECTRODES.
- 7. THE PROJECT SPECIFICATIONS REQUIRE THE CONTRACTOR TO SUBMIT INFORMATION ON HIS PROPOSED PILE DRIVING SYSTEM FOR REVIEW BY THE GEOTECHNICAL ENGINEER PRIOR TO EQUIPMENT MOBILIZATION. THE SYSTEM SHOULD BE CAPABLE OF INSTALLING THE PILES TO THE SPECIFIED MINIMUM ULTIMATE GEOTECHNICAL CAPACITY WITHOUT EXCEEDING THE ALLOWABLE DRIVING STRESSES. THE REVIEW WILL INCLUDE A WAVE EQUATION ANALYSIS OF THE PROPOSED DRIVING
- 8. IBC REQUIRES PILE LOAD TESTING FOR THIS PROJECT. REFERENCE THE PROJECT SPECIFICATIONS FOR LOAD TESTING REQUIREMENTS.
- 9. BOTTOMS OF EXTERIOR PILE CAPS SHOULD BE FOUNDED AT LEAST 4.5 FT. BELOW ADJACENT FINISHED GROUND SURFACE FOR FROST PROTECTION AND UNDERLAIN WITH CRUSHED STONE. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
- 10. PILE CAP SUBGRADE SOILS SHOULD NOT BE ALLOWED TO FREEZE. THE FILL SOILS AT THE SITE ARE CONSIDERED MODERATELY TO SLIGHTLY FROST—SUSCEPTIBLE. FREEZING OF SUBGRADE SOILS BENEATH PILE CAPS MAY RESULT IN FROST HEAVING OR LATERAL WEDGING. THE CONTRACTOR SHOULD MAKE EVERY EFFORT TO PREVENT FREEZING OF SUBGRADE SOILS.
- 11. PILES SHALL BE DRIVEN IN THE LOCATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING TOLERANCES: DEVIATION OF THE LOCATION OF THE TOP OF A PILE FROM THAT SHOWN ON PLANS SHALL NOT EXCEED 3 INCHES. PILES SHALL BE DRIVEN WITH A MAXIMUM DEVIATION FROM VERTICAL OF 2 INCHES IN 10 FEET OF PILE LENGTH.
- 12. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
- 13. REFERENCE THE GEOTECHNICAL REPORTS FOR ALL EXCAVATION, BACKFILL, COMPACTION, CONSTRUCTION DEWATERING AND PERMANENT DRAINAGE
- 14. SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS AND SHOULD BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHOULD BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.
- 15. EXCAVATIONS FOR BUILDING CONSTRUCTION SHALL BE IN ACCORDANCE
 WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY
 A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE. DO NOT
 UNDERMINE EXISTING FOUNDATIONS OF ANY ADJACENT STRUCTURES. REFER TO
 THE GEOTECHNICAL REPORTS FOR ADDITIONAL AND/OR MORE SPECIFIC
 REQUIREMENTS.

OPEN WEB STEEL JOISTS

- 1. DESIGN, DETAIL, FABRICATE AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE LATEST EDITION OF STANDARD SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI)
- 2. HANGERS FOR DUCTS, PIPES, UNITS, ETC., MUST BE ATTACHED TO JOISTS AT PANEL POINTS ONLY. EXCEPT WHERE DESIGNATED ON "SP" JOISTS, IN NO CASE SHALL ANY SINGLE POINT LOAD EXCEED 300 LBS.
- 3. PROVIDE BRIDGING AND BRIDGING ANCHORAGE IN ACCORDANCE WITH SJI SPECIFICATIONS. PROVIDE ADDITIONAL BRIDGING FOR UPLIFT FOR ROOF JOISTS WHERE REQUIRED BY SJI SPECIFICATIONS.

METAL DECK

- 1. THE METAL ROOF AND FLOOR DECK SHALL BE FORMED OF STEEL SHEETS CONFORMING TO ASTM STANDARD A611.
- 2. FLOOR AND ROOF DECK SHALL BE AS NOTED ON THE DRAWINGS (OR EQUIVALENT).
- FOR DECK ATTACHMENTS, PENETRATIONS AND ACCESSORIES, REFER TO SPECIFICATIONS.

CONCRETE NOTES

- 1. CONCRETE WORK SHALL CONFORM TO "ACI MANUAL OF CONCRETE PRACTICE", LATEST EDITION. THIS PUBLICATION IS AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848—3800.
- 2. ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI, U.N.O. EXTERIOR SLAB-ON-GRADE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI. ADDITIONAL CONCRETE MIX PERFORMANCE DATA INCLUDING AIR CONTENT, WATER-CEMENT RATIO, AIR CONTENT, AGGREGATE SIZE, SLUMP, ETC. HAS BEEN INCLUDED IN THE PROJECT SPECIFICATIONS. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIRMENTS.
- 3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- 4. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE,
- 5. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION.
- 6. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT
- 7. FIBER REINFORCEMENT SHALL BE TYPE III SYNTHETIC VIRGIN HOMOPOLYMER POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.
- 8. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:
 - A) SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH, 3.0"
 B) FORMED SURFACES IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
 #5 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5"
 #6 THROUGH #11 BARS, 2.0"
 - C) SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER
 WALLS, SLABS, JOISTS #11 BARS AND SMALLER, 1.0"
 BEAMS, GIRDERS, AND COLUMNS; ALL REINFORCEMENT, 1.5"
- 9. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE LAPPED BARS AT NECESSARY SPLICES OR HOOKED BARS AT DISCONTINUOUS ENDS. PROVIDE TENSION LAP SPLICES PER THE SCHEDULE ON DRAWING S2.1, FOR ALL REINFORCING UNLESS OTHERWISE INDICATED OR SHOWN ON PLAN.
- 10. WELDING OF REINFORCEMENT IS NOT PERMITTED.
- 11. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS TYPICAL DETAILS.
- 12. DRAWINGS SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS AND CONCRETE PLACING SEQUENCE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO PREPARATION OF THE REINFORCEMENT SHOP DRAWINGS. CONCRETE SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS EXCEPT WHERE SHOWN OR NOTED. VERTICAL CONSTRUCTION JOINTS AND STOPS IN CONCRETE BEAMS/GRADE BEAMS SHALL BE MADE AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR, UNLESS NOTED OTHERWISE.
- 13. SPACING OF CONSTRUCTION JOINTS, UNLESS NOTED OTHERWISE SHALL
 BE AS FOLLOWS:
 A) FOOTINGS AND WALLS
 MAX LENGTH 40'-0" NOR 15'-0"
 FROM ANY CORNER**
 B) SLABS ON GRADE
 SEE FOUNDATION PLAN
- ** EXCEED ONLY WHERE INTERMEDIATE CONTRACTION JOINTS ARE PROVIDED. MINIMUM OF 72 HOURS SHALL ELAPSE BETWEEN ADJACENT CONCRETE PLACEMENTS.
- 14. ANCHOR RODS SHALL BE HEADED RODS CONFORMING TO ASTM F1554, GRADE 36 KSI WELDABLE STEEL, UNLESS NOTED OTHERWISE ON DRAWINGS. ANCHOR RODS THAT ARE TO BE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT—DIPPED GALVANIZED.
- 15. ALL GROUT BENEATH BASE PLATES & BEARING PLATES SHALL BE "5-STAR" 5000-PSI NON-SHRINK GROUT BY U.S. GROUT CORP.
- 16. SLAB THICKNESSES INDICATED ON THE DRAWINGS ARE MINIMUMS. PROVIDE SUFFICIENT CONCRETE TO ACCOUNT FOR STRUCTURE DEFLECTION, SUBGRADE FLUCTATIONS, AND TO OBTAIN THE SPECIFIED SLAB ELEVATION AT THE FLATNESS AND LEVELNESS INDICATED.

STRUCTURAL STEEL NOTES

- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATION, AND ERECTION OF STRUCTURAL STEEL" 9TH EDITION, AND THE "CODE OF STANDARD PRACTICE, LATEST EDITION.
- 2. STRUCTURAL STEEL: STEEL PLATES, SHAPES, AND BARS, CONFORM TO ASTM A36
 UNLESS NOTED OTHERWISE (U.N.O.). STRUCTURAL STEEL SHAPES DESIGNATED ON
 THE DRAWINGS FOR WIDE—FLANGE SECTIONS: ASTM A992 (ASTM A572 GRADE 50
 WITH SPECIAL REQUIREMENTS PER AISC TECHNICAL BULLETIN #3 DATED MARCH, 1997)
- 3. STRUCTURAL TUBING: CONFORM TO ASTM A500 GRADE B46 KSI.
- 4. CONNECTION DESIGN FOR THIS PROJECT IS THE RESPONSIBILITY OF THE FABRICATOR. CONNECTION CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR THIS PROJECT. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 5. FIELD CONNECTIONS SHALL BE BOLTED USING ASTM A325N HIGH STRENGTH BOLTS (U.N.O.) EXCEPT WHERE SLIP CRITICAL CONNECTIONS ARE REQUIRED AND NOTED BY A325 (SC) ON THE DRAWINGS. PROVIDE SLIP CRITICAL (SC) CONNECTIONS AT ALL MOMENT CONNECTIONS, BRACED FRAMES, RELIEVING ANGLES AND AS OTHERWISE NOTED. USE A490 BOLTS WHERE INDICATED.
- 6. WHERE WELDING IS INDICATED, ALL WELDING SHALL CONFORM TO AWS D1.1— LATEST EDITION. ELECTRODES SHALL BE CONFORM TO AWS A5.1 E70XX SERIES WITH PROPER ROD TO PRODUCE OPTIMUM WELD (LOW HYDROGEN).
- 7. SEE CONCRETE NOTES AND DRAWINGS FOR ANCHOR BOLT INFORMATION, TYP.
- 8. PROVIDE 3/8" MINIMUM STIFFENER PLATES EACH SIDE OF BEAM WEB AT BEAMS FRAMING OVER COLUMNS AND AT BEAMS SUPPORTING COLUMNS ABOVE.
- 9. PROVIDE 1/4" THICK LEVELING PLATE UNDER ALL COLUMN BASE PLATES UNLESS OTHERWISE NOTED. LEVELING PLATES SHALL BE SET AND GROUTED PRIOR TO ERECTING COLUMNS.
- 10. PROVIDE ALL MISCELLANEOUS ANGLES, PLATES, ANCHORS, BOLTS, ETC., SHOWN ON ARCHITECTURAL DRAWINGS FOR SUPPORT OF BLOCKING, PARAPETS, FINISHES, ETC. COORDINATE WITH MISCELLANEOUS METAL FABRICATOR TO ENSURE COMPLETE COVERAGE OF ALL ITEMS.
- 11. PROVIDE L 4 × 4 × 1/4 SLAB SUPPORT ANGLE AS REQUIRED AT COLUMNS WHERE STRUCTURAL MEMBERS DO NOT FRAME IN AT ALL FOUR SIDES.

PRECAST CONCRETE HOLLOW CORE PLANK

- 1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING: ACI 318
 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", PCI MNL-116
 "MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF PRECAST
 AND PRESTRESSED CONCRETE PRODUCTS" AND PCI "DESIGN HANDBOOK-PRECAST
 AND PRESTRESSED CONCRETE".
- 2. PRECAST HOLLOW CORE PLANK SHALL BE DESIGNED FOR THE LIVE LOADS AS INDICATED UNDER "DESIGN LOADS" THIS SHEET. DESIGN SHOULD INCLUDE FOR ALL DEAD LOADS DUE TO SELF WEIGHT AND APPLIED TOPPINGS AND TREATMENTS.
- 3. CONCRETE STRENGTH SHALL BE MINIMUM 5000 PSI AT 28 DAYS.
- 4. ALL CONCRETE SHALL BE AIR ENTRAINED. MEET AIR ENTRAINING REQUIREMENTS
 PER ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301)", FOR CLASS OF
 CONCRETE AND APPLICATION. AIR ENTRAINMENT ALL EXTERIOR CONCRETE 6% ± 1%.
- 5. PRESTRESSING TENDONS SHALL CONFORM WITH ASTM A416, GRADE 250.
- 6. COMPLETE SHOP DRAWINGS AND DESIGN CALCULATIONS STAMPED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK.
- 7. COORDINATE WITH ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWING FOR LOCATION OF CUTS AND PENETRATIONS. INDICATE LOCATION OF ALL OPENINGS ON SHOP DRAWINGS. INDICATE IF PENETRATIONS ARE SHOP OR FIELD CUT

MASONRY NOTES

- 1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1-02.
- 2. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C90 GRADE N, TYPE I STANDARD WEIGHT BLOCKS INCLUDING STRETCHERS AND CORNER BLOCKS. MINIMUM PRISM STRENGTH OF BLOCK SHALL BE F'M = 1500 PSI IN 28 DAYS.
- 3. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270, TYPE M OR S
- 4. GROUT SHALL CONFORM TO ASTM-C476
- 5. REINFORCING FOR BOND BEAMS, LINTEL BLOCKS AND VERTICAL WALL
 REINFORCING SHALL BE BILLET STEEL CONFORMING TO ASTM A615, GRADE 60
- 6. HORIZONTAL JOINT REINFORCING SHALL BE DUR-O-WAL TRUSS DESIGN, STANDARD CLASS MILL GALVANIZED WITH 3/16" DIAMETER SIDE RODS AND 9 GAUGE CROSS TIES, UNO. REINFORCING SHALL BE PLACED IN MASONRY WALLS AT EVERY SECOND BLOCK
- 7. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE NOTED. PROVIDE FULL MORTAR COVERAGE ON ALL WEBS AND FACE SHELLS.
 PROVIDE CORNER BLOCKS AND END BLOCKS TO FINISH ALL 90 DEGREE CORNERS AND WALL OPENINGS
- 8. PROVIDE LINTELS AS AT WALL PENETRATIONS AS SHOWN IN THE LINTEL SCHEDULE.
- 9. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT
- 10. CELLS TO BE GROUTED SHALL BE 2—CELL BLOCK. ALIGN CELLS TO MAINTAIN A CLEAR UNOBSTRUCTED, CONTINUOUS VERTICAL CHASE. CELLS MUST BE KEPT CLEAN OF PROTRUSIONS OR FINS OF MORTAR. FILL CELLS OF MASONRY UNITS AND WALL CAVITIES WHERE INDICATED WITH 2500 PSI GROUT. MAXIMUM GROUT LIFT WITHOUT CLEAN—OUTS SHALL BE 4'—O". HIGH LIFT GROUTING SHALL CONFORM TO CODE REQUIREMENTS WITH A MINIMUM CEMENT CONTENT OF 8 SACKS PER CUBIC YARD. SUPPORT ALL VERTICAL BARS IN CENTER OF GROUTED CELLS WITH VERTICAL BAR POSITIONER.
- 11. FIELD PENETRATIONS THROUGH BLOCK WALLS SHALL NOT BE MADE THROUGH BOND BEAMS, LINTELS OR GROUTED CELLS.

<u>LINTELS</u>

1. THE FOLLOWING LINTELS SHALL BE USED FOR MASONRY OPENINGS:

MASONRY_OPENING	LINTEL SIZE
UP TO 3'-0"	L 3 1/2 x3 1/2 x 5/16
3'-1" TO 4'-6"	L 4 x 3 1/2 x 5/16 (LLV)
4'-7" TO 6'-0"	L 5 x 3 1/2 x 5/16 (LLV)
6'-1" TO 8'-0"	L 6 x 3 1/2 x 5/16 (LLV)
8'-1" TO 12'-0"	L 6 x 3 1/2 x 3/8 (LLV)

- 2. PROVIDE ONE ANGLE FOR EACH 4" WALL THICKNESS. FOR 6" WALL THICKNESS, PROVIDE WT OR BUILT-UP SECTION WITH PROPERTIES EQUAL TO OR GREATER THAN 1 1/2 TIMES THE ANGLE PROPERTIES FOR A 4" WALL THICKNESS.
- 3. PROVIDE 8" OF BEARING AT EACH END OF ALL LINTELS.
- 4. ALL EXTERIOR LINTELS SHALL BE HOT-DIPPED GALVANIZED.

CMU LIN	ITEL .	SCHEL	DULE
CLEAR SPAN	WIDTH	DEPTH	REINF
< 6'-0"	8"	8"	2#5 CONT
6'-0" - 8'-0"	8"	16"	2#5 CONT

NOTE: SEE ARCH DWGS FOR LINTEL TYPE, NUMBER & LOCATIONS.



construction company

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Project Title		
	ARGINAL WAY	
HA Project No.	06196	
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PAUL B.

BECKER

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- 05.21.07 100% FOUNDATION SET
- 03.16.07 95% REVIEW DOCUMENT SET
- 02.28.07 FOUNDATION PERMIT SET

Mark Date Description

Issue Dates

100% FOUNDATION SET

Drawing Title

GENERAL NOTES

PA / PE: EAR

Drawing Status

Drawing Number

Drawn By: 🛕 🗁 🗁