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 ARCHITECT 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. SUBMIT ONE COPY AND ONE SEPIA. COPY WILL BE REVIEWED AND SEPIA WILL BE RETURNED. 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 (2003 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 INSPECTIONS.

10. REFERENCE THE PROJECT SPECIFICATIONS FOR ALL TESTING REQUIREMENTS.

DESIGN LOADS

1. BUILDING CODE:
   INTERNATIONAL BUILDING CODE, 2003 EDITION
   ASCE 7-02 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

2. DESIGN FLOOR LIVE LOADS:
   ALL INTERIOR SPACES UNLESS NOTED OTHERWISE: 100 PSF
   FIXED SEAT ASSEMBLY & FLY SPACE: 60 PSF
   CATWALK: 40 PSF

3. DESIGN ROOF SNOW LOAD:

GROUND SNOW LOAD (Pg):	60 PSF
SNOW EXPOSURE FACTOR (Ce):	1.0
SNOW LOAD IMPORTANCE FACTOR (Is):	1.1
SNOW LOAD THERMAL FACTOR (Ct):	1.1
FLAT ROOF SNOW LOAD (Pf):	51 PSF + DRIFT

4. DESIGN WIND LOAD:

BASIC WIND SPEED:	100 MPH
WIND LOAD IMPORTANCE FACTOR (Iw):	1.15
WIND EXPOSURE:	B
INTERNAL PRESSURE COEFFICIENT:	±0.18

   COMPONENTS & CLADDING LOADS PER ASCE 7-02

5. DESIGN SEISMIC LOADS:
   EQUIVALENT LATERAL FORCE PROCEDURE
   SEISMIC USE GROUP: II
   SEISMIC IMPORTANCE FACTOR (Ie):1.25
   MAPPED SPECTRAL RESPONSE ACCELERATIONS:
   Ss: 0.379
   S1: 0.098
   SEISMIC SITE CLASS: C
   SPECTRAL RESPONSE COEFFICIENTS:
   Sds: 0.303
   Sd1: 0.111
   SEISMIC DESIGN CATEGORY: B
   BASIC STRUCTURAL SYSTEM: STRUCTURAL STEEL SYSTEMS NOT SPECIFICALLY DESIGNED FOR SEISMIC RESISTANCE
   RESPONSE MODIFICATION FACTOR (R): 3
   SEISMIC RESPONSE COEFFICIENT (Cs), 0.126

FOUNDATION NOTES (SOIL SUPPORTED)

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH A REPORT ENTITLED "GEOTECHNICAL ENGINEERING SERVICES, PROPOSED ADDITION-WAYNFLETE SCHOOL, 360 SPRING STREET, PORTLAND, MAINE", PREPARED BY S.W. COLE ENGINEERING, INC., DATED 04/18/2001. THE RECOMMENDATIONS OF THE REPORT ARE PART OF THIS WORK. REFER TO THIS REPORT FOR SPECIFIC RECOMMENDATIONS.

2. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE UNDISTURBED NATIVE SOILS AND/OR NEW COMPACTED STRUCTURAL FILL EXTENDING TO UNDISTURBED NATIVE SOIL.

3. ALLOWABLE BEARING CAPACITY 4,000 PSF.

4. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.5 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.

5. ALL PAVEMENT, EXISTING FOUNDATIONS AND UNCONTROLLED GRANULAR FILL SHOULD BE REMOVED FROM THE AREA OF THE PLANNED ADDITION TO AT LEAST 4 FEET BEYOND THE FOOTING LIMIT.

6. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.

7. COMPACTED STRUCTURAL FILL SHALL BE USED TO BACKFILL TO THE DESIGN FOOTING SUBGRADE AND BENEATH ALL SLABS ON GRADE. REFER TO FOUNDATION SECTION ON PAGE 8 OF THE REPORT, STRUCTURAL FILL SHALL BE A CLEAN SAND-GRAVEL MIXTURE MEETING THE GRADATION PRESENTED IN THE REPORT. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL MATERIAL GRADATIONS TO BE USED FOR FOUNDATION BACKFILL, BACKFILL, ETC.

8. STRUCTURAL FILL SHALL BE PLACED IN UNIFORM LIFTS AS REFERENCED IN THE GEOTECHNICAL REPORT AND BE COMPACTED BENEATH SLABS TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST. COMPACT ADJACENT TO FOUNDATION WALLS SUPPORTING UNBALANCED FILL (RETAINING WALLS) TO 94-96 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557. HAND OPERATED EQUIPMENT SHALL BE USED FOR COMPACTION WITHIN 8 FEET OF NEW FOUNDATION WALL.

9. PROVIDE A PVC DRAINPIPE AROUND THE PERIMETER OF THE STRUCTURE. LOCATE AT THE BOTTOM OF THE FOUNDATION WALLS AND PROVIDE POSITIVE GRAVITY FLOW TO PROPERLY DESIGNED OUTLET. REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.

10. 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.

11. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE.

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 4,500 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, OR SLABS.

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 SHEETS.

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 DRAWING S2.1, FOR ALL REINFORCING UNLESS OTHERWISE 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. NO PENETRATIONS SHALL BE MADE THROUGH FOOTINGS WITHOUT WRITTEN PERMISSION FROM ENGINEER.

12. CONSTRUCTION JOINTS SHOWN ON DRAWINGS ARE MANDATORY. OMISSIONS, ADDITIONS, OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMITTAL OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF THE PROPOSED JOINT LOCATIONS FOR APPROVAL OF THE STRUCTURAL ENGINEER. WHERE CONSTRUCTION JOINTS ARE NOT SHOWN, OR WHEN ALTERNATE LOCATIONS ARE PROPOSED, 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

1. 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 x 4 x 1/4 SLAB SUPPORT ANGLE AS REQUIRED AT COLUMNS WHERE STRUCTURAL MEMBERS DO NOT FRAME IN AT ALL FOUR SIDES.

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).

3. FOR DECK ATTACHMENTS, PENETRATIONS AND ACCESSORIES, REFER TO SPECIFICATIONS.

LINTELS

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.

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PROJECT

WAYNFLETE ARTS CENTER
PHASE TWO

ADDITION/ RENOVATION
360 SPRING STREET
PORTLAND, ME

TITLE

GENERAL NOTES

STATUS: ISSUED FOR BIDDING

DATE: 09.07.2007	REVISION /DATE:
NOTED	
PROJECT NO. 2003-0040.00	
DRAWN BY: APP	

DWG NO.

S1.0