

GENERAL NOTES:

ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE BUILDING CODE OF THE CITY OF NEW YORK, AND OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS, AND DETAILS, THE MOST RIGID REQUIREMENTS SHALL GOVERN. NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICT.

COORDINATE THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL AND W/E/P DRAWINGS.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SHORING AND BRACING REQUIRED FOR PLUMBNESS, STRUCTURAL STABILITY AND SAFETY WHENEVER REQUIRED TO SUPPORT LOADS AS MAY BE IMPOSED UPON THE STRUCTURE DURING CONSTRUCTION. BRACING AND SHORING AND SEQUENCES OF SUCH WORK SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HIS/HER LICENSED ENGINEER. REGISTERED IN THE STATE OF THE PROJECT'S JURISDICTION. ALL SUBMITTALS SHALL BEAR THIS ENGINEER'S SEAL AND SIGNATURE.

SHORE ALL EXISTING SUSPENDED CONDUITS, PIPES, DUCTS, ETC. REFASTEN TO NEW CONSTRUCTION. DO NOT DAMAGE ANY EMBEDDED CONDUITS OF EMBEDDED ITEMS DURING DEMOLITION. REROUTE W/E/P UTILITIES AS REQ'D. CONTRACTOR SHALL VERIFY IN FIELD EXISTENCE OF ANY ELECTRICAL CONDUITS IN SLAB PRIOR TO CUTTING. REROUTE AS REQUIRED.

EXISTING CONDITIONS, ELEVATIONS, DIMENSIONS AND SYSTEMS SHOWN ON PLANS ARE BASED ON LIMITED FIELD OBSERVATIONS. THE CONTRACTOR SHALL FIELD-VERIFY ALL DETAILS, DIMENSIONS AND ASSUMPTIONS PRIOR TO ANY WORK, AND COORDINATE WITH ARCHITECTURAL AND W/E/P DRAWINGS FOR FINAL CONSTRUCTION. WHERE EXISTING CONDITIONS DIFFER FROM OR PRECLUDE THE EXCAVATION OF THE OUTLINED DETAILS, THE CONTRACTOR SHALL PROVIDE A SKETCH OF THE CONDITION WITH HIS PROPOSED MODIFICATION OF THE DETAILS GIVEN ON THE CONTRACT DOCUMENTS. DO NOT COMMENCE WORK UNTIL CONDITION IS RESOLVED AND MODIFICATION IS REVIEWED FAVORABLY.

DO NOT FABRICATE ANY WORK WITHOUT APPROVED STRUCTURAL SHOP DRAWINGS FOR ALL STRUCTURAL WORK, AND MECHANICAL/ARCHITECTURAL SHOP DRAWINGS RELATED TO THE STRUCTURAL WORK.

CONTRACTOR TO PROTECT AT ALL TIMES EQUIPMENT, PIPES AND OTHER EXPOSED OR EMBEDDED ITEMS ON THE SITE AGAINST DAMAGE. COORDINATE WITH ARCHITECTURAL AND W/E/P DWGS AND REROUTE AS REQUIRED.

ALL DIMENSIONS AND ELEVATIONS FOR FINAL CONSTRUCTION SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND COORDINATED WITH ARCH./W/E/P DRAWINGS. SHOP DRAWINGS SHALL BE BASED ON EXISTING CONDITIONS AND DIMENSIONS.

ANY ADDITIONAL WORK/BRACING/FOUNDATIONS NOT SPECIFICALLY SHOWN OR CALLED FOR IN THE DRAWINGS AND SPECIFICATIONS, THAT ARE REQUIRED TO COMPLETE THE INTENT OF THE WORK, SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR AS IF INCLUDED IN THE DRAWINGS/SPECIFICATIONS. THE CONTRACTOR SHALL ADVISE THE ENGINEER OF SUCH OCCURRENCES.

FOR WATERPROOFING, FLASHING, PITCH POCKET, DRAINAGE AND INSULATION DETAILS, SEE ARCH. DRAWINGS.

REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR SUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.

SHOP DRAWINGS SUBMITTED FOR STRUCTURAL REVIEW SHALL CONSIST OF TWO (2) SETS OF PRINTS AND ONE (1) SET OF REPRODUCIBLES. ONLY ONE (1) MARKED UP SET OF REPRODUCIBLE WITH THE STRUCTURAL ENGINEER'S COMMENTS WILL BE RETURNED TO THE CONTRACTOR.

CONTRACTOR SHALL ALLOW FOR TWO WEEKS OF REVIEW TIME FOR EACH SHOP DRAWING SUBMITTAL AND SHOULD SCHEDULE ALL SUBMITTALS ACCORDINGLY.

AT ALL DRYWALL NON-LOAD BEARING PARTITIONS, PROVIDE SPL CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE TOP OF ALL SUCH PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF THE WALLS LATERALLY FOR THE CODE-REQUIRED LATERAL LOAD.

SUBMIT PERIODIC INSPECTION REPORTS WITHIN ONE BUSINESS DAY AFTER RECEIPT BY THE CONTRACTOR TO ARCHITECT/ENGINEER DURING CONSTRUCTION. SUBMIT FINAL INSPECTION REPORT SUMMARY FOR EACH DIVISION OF WORK, CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER, THAT INSPECTIONS WERE PERFORMED AND THAT WORK WAS PERFORMED IN ACCORDANCE WITH CONTRACT DOCUMENTS.

INSPECTION IS REQUIRED OF ALL CONSTRUCTION SPECIFIED ON THE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL EMPLOY A TESTING/INSPECTION AGENCY ACCEPTABLE TO THE ARCHITECT AND OWNER.

ANCHOR BOLTS INTO ALL SUBSTRATES (BRICK, CMU, RUBBLE, CONCRETE, TERRA COTTA, ETC.) SHALL BE TESTED PER MANUFACTURER'S RECOMMENDATIONS TO VERIFY SUFFICIENCY OF APPLICATION. IN THE EVENT THAT ANCHORS ARE NOT SUITABLE, THE CONTRACTOR SHALL PROVIDE SIMILAR ANCHORS ADEQUATE FOR THE SPECIFIED APPLICATIONS AND ACCEPTABLE TO THE ARCHITECT AND ENGINEER. ALL TESTING SHALL BE BY A TESTING AGENCY RETAINED BY THE CONTRACTOR. WHEN BOLTING TO REINFORCED SLAB, PROVIDE PILOT DRILLED HOLES PRIOR TO DRILLING FINAL BOLT HOLES TO INSURE EXISTING REBARS SLAB REINFORCEMENT AND/OR SLAB ARE NOT DAMAGED.

THE DESIGN, DETAIL, AND NOTES INCLUDED HEREIN ARE IN COMPLIANCE WITH LOCAL LAW 17/95.

EXCAVATION AND FOUNDATION NOTES:

ALL MATERIAL, FABRICATION, INSTALLATION, AND INSPECTION REQUIREMENTS RELATING TO THE FOUNDATIONS SHALL CONFORM TO THE NEW YORK CITY BUILDING CODE.

ALL STRUCTURAL WORK SHALL BE COORDINATED AND VERIFIED WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING REQUIREMENTS.

THE CONTRACTOR SHALL DEMOLISH AND REMOVE EXISTING ELEMENTS AS INDICATED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL REMOVE, TRANSPORT, AND DISPOSE OF ALL DEBRIS PROMPTLY.

EXCAVATION SHALL BE PERFORMED SO AS NOT TO DISTURB EXISTING ADJACENT BUILDINGS, STREETS, AND UTILITY LINES. VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. HAND EXCAVATE AROUND AND RESURPORT UTILITIES AS REQUIRED.

THE CONTRACTOR SHALL PROTECT ALL EXCAVATIONS FROM FLOODING AND EXISTING WATER TABLE AND PROVIDE CONTINUOUS PUMPING AS REQUIRED FOR PERFORMANCE OF WORK. THE DEPTH OF EXCAVATION SHALL NOT BE CARRIED DEEPER THAN SPECIFIED IN THE CONTRACT DOCUMENTS WITHOUT THE ENGINEER OF RECORD'S CONSENT.

THE SUBGRADE FOR FOOTINGS, PILE CAPS, STRAP BEAMS AND SLABS SHALL BE INSPECTED AND APPROVED BY THE CONTRACTOR'S SOIL INSPECTION AGENCY IMMEDIATELY PRIOR TO PLACING FOUNDATION CONCRETE. THE AGENCY SHALL BE ACCEPTABLE TO THE ARCHITECT AND OWNER AND PRODUCE REPORTS WHICH SHALL BE SUBMITTED TO THE ARCHITECT OUTLINING WORK PERFORMED AND TEST RESULTS.

FOUNDATION SUBGRADES SHOULD BE THOROUGHLY CLEARED OF ALL MUD, DEBRIS AND LOOSE MATERIAL PRIOR TO THE PLACEMENT OF CONCRETE OR CRUSHED STONE.

THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO CONTROL ICE, FROST, SURFACE AND SUBSURFACE WATER SO THAT THE FOUNDATION WORK IS PERFORMED ON DRY SUBGRADE.

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

ALL UNDERPINNING, SHEETING, LAGGING, SHORING OR OTHER SIMILAR DEVICES AND CONSTRUCTION REQUIRED SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE SUBJECT TO CONTROLLED INSPECTIONS AS REQUIRED BY THE NEW YORK CITY CODE. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK TO PROVIDE ALL NECESSARY DESIGNS AND REQUIRED INSPECTIONS. PROVIDE & SUBMIT SHOP DRAWINGS & SEQUENCES FOR REVIEW.

DO NOT PLACE CONCRETE WITHOUT APPROVED STRUCTURAL SHOP DRAWINGS AND MECHANICAL/ARCHITECTURAL SHOP DRAWINGS RELATED TO THE CONCRETE WORK.

THE CONTRACTOR SHALL PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO PREVENT DAMAGE AND SETTLEMENT (HORIZONTAL AND VERTICAL) OF EXISTING OR NEW CONSTRUCTION, INSIDE OR OUTSIDE THE PROJECT LIMITS.

NEW EXCAVATION SHALL NOT UNDERMINE NOR DISTURB ANY EXISTING ADJACENT FOOTINGS, PILE CAPS OR SLABS. NEW FOOTINGS/PILE CAPS SHALL BE SUPPORTED IN A MANNER TO MAINTAIN AN EXCAVATION SLOPE OF ONE VERTICAL TO TWO HORIZONTAL BETWEEN THE BOTTOM OF FOOTINGS/PILE CAPS AND EXCAVATION. REROUTE ANY UNDERGROUND UTILITIES IF REQUIRED.

ALL FILL REQUIRED BELOW ANY PORTION OF THE STRUCTURE SHALL BE COMPACTED IN 8" LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY PER ASTM D698 AND D-1557. REMOVE UNSUITABLE FILL AND REPLACE WITH CONTROLLED FILL AS REQUIRED FOR SOUND PLACEMENT OF FOUNDATIONS. NEW CONTROLLED FILL SHALL BE CRUSHED STONE RECYCLED CONCRETE AGGREGATE OR GRANULAR SAND AND GRAVEL WITH LESS THAN 35% PASSING THE #200 SIEVE.

PROVIDE CONTINUOUS WATERSTOPS IN ALL EXTERIOR WALL CONSTRUCTION JOINTS.

SEE ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING, DAMPROOFING, PROTECTION BOARDS AND INSULATION DETAILS.

FOUNDATION WALL, PILE AND PILE CAP DESIGN MAY REQUIRE MODIFICATION AFTER EXISTING SOIL BEARING CAPACITY AND SUBSURFACE CONDITIONS HAVE BEEN FIELD VERIFIED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER.

THE PERIMETER OF ALL EXCAVATIONS SHALL BE RETAINED BY A TEMPORARY SOIL/ROCK RETENTION SYSTEM. THE DESIGN, INSTALLATION, MAINTENANCE AND REMOVAL (WHERE REQUIRED) SHALL BE THE COMPLETE AND SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO PREVENT DAMAGE AND SETTLEMENT OF EXISTING OR NEW CONSTRUCTION INSIDE OR OUTSIDE THE PROJECT LIMITS. ANY DAMAGE TO NEW OR EXISTING CONSTRUCTION INSIDE OR OUTSIDE THE PROJECT LIMITS, CAUSED BY CONSTRUCTION TECHNIQUES OR MOVEMENTS OF THE SOIL/ROCK RETENTION SYSTEM, IS THE RESPONSIBILITY OF THE CONTRACTOR.

DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL ALL SUPPORTING SLABS (OR BRACING) HAS BEEN PLACED AND THE CONCRETE HAS OBTAINED FULL 28-DAY DESIGN STRENGTH. PROVIDE BRACING/SHORING AS REQUIRED TO EXISTING WALLS DURING WORK.

THE CONTRACTOR SHALL COORDINATE ALL ELEMENTS OF THE SOIL/ROCK RETENTION SYSTEM WITH ALL ELEMENTS OF THE PERMANENT BUILDING.

WRITTEN PERMISSION SHALL BE SECURED BY THE CONTRACTOR FROM OWNER OF ADJACENT PROPERTIES FOR ANY WORK AFFECTING THEIR PROPERTIES PRIOR TO COMMENCING WORK.

ALL EXCAVATION SHALL BE BASED ON ENGINEERING DRAWINGS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK AND RETAINED BY THE CONTRACTOR. THE DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND SHALL INCLUDE PLANS AND SECTIONS OF EXCAVATION SEQUENCES. THE EXCAVATION SEQUENCES SHALL BE CONTROLLED TO MATCH THE REQUIREMENTS OF THE DESIGN OF THE SOIL RETENTION SYSTEM.

THE GENERAL EXCAVATION SHALL CONSIST OF EXCAVATING AND REMOVING THE EXISTING SURFICAL FILL MATERIALS TO REACH THE DESIRED SUBGRADE LEVEL. THE EXPOSED SUBGRADE SHOULD BE PRODFOLLED AND COMPACTED TO A FIRM AND UNYIELDING CONSISTENCY. THE EXCAVATION FOR FOOTINGS/PILE CAPS, PITS, ETC. SHALL BE EXCAVATED ON AN INDIVIDUAL, LOCALIZED BASIS DOWN FROM THE SLAB-ON-GRADE SUBGRADE LEVEL. EACH EXCAVATION SHALL BE A TRIM, LEVEL SURFACE.

ROCK EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF ALL LAWS AND AUTHORITIES HAVING JURISDICTION AND SHALL NOT CREATE VIBRATIONS THAT MAY DAMAGE EXISTING OR NEW CONSTRUCTION.

THE CONTRACTOR SHALL PROVIDE POSITIVE PROTECTION (MAT/SHEET COVERINGS) FOR ALL EXCAVATION SLOPES TO PROTECT SLOPES FROM INSTABILITY AND DETERIORATION DUE TO RAIN, WIND OR SNOW/ICE.

CONCRETE FOR FOUNDATIONS SHALL BE POURED ON THE SAME DAY THE SUBGRADE IS APPROVED BY THE CONTRACTOR'S SOIL INSPECTION AGENCY.

UTILITY LINES SHALL NOT BE PLACED THROUGHT OR BELOW FOUNDATIONS.

ALL MINI CAISSON MATERIALS AND OPERATIONS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE NEW YORK CITY BUILDING CODE.

MINI CAISSON CAPACITY, DRILLING PROCEDURE, CASING SIZE, MATERIAL, GROUT STRENGTH AND REINFORCING SHALL BE SUBMITTED TO THE OWNER'S GEOTECHNICAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY CAISSON WORK.

DRILLED MINI CAISSONS SHALL BE INSTALLED PER GEOTECHNICAL APPROVAL AND SHALL HAVE A MINIMUM ALLOWABLE CAPACITY AS INDICATED ON PLAN..

ALL MINI CAISSONS SHALL BE SOCKETED INTO BEDROCK TO A DEPTH APPROVED BY THE GEOTECHNICAL ENGINEER.

MINI CAISSON CONTRACTOR SHALL SUBMIT ACTUAL MINI CAISSON DESIGN AND CALCULATIONS, PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK.

STEEL PIPE USED AS PERMANENT CASING SHALL INCORPORATE AN ADDITIONAL THICKNESS FOR CORROSION PROTECTION.

GROUT FOR MINI CAISSONS SHALL BE TESTED BY AN INDEPENDENT TESTING LABORATORY.

ALL MINI CAISSON INSTALLATION OPERATIONS SHALL BE SUPERVISED BY A LICENSED ENGINEER. THE INSPECTOR SHALL KEEP A COMPLETE RECORD OF THE MINI CAISSON INSTALLATION OPERATION.

DRILLED MINI CAISSON SHOULD BE INSTALLED AS SHOWN ON THE ENGINEER'S PLAN. ALL CHANGES IN MINI CAISSON LOCATION MUST BE APPROVED BY THE ENGINEER.

ALL MINI CAISSON SPWICE MATERIAL SHALL BE OF STRUCTURAL STEEL OF A MINIMUM STRENGTH EQUAL TO OR GREATER THAN THE STRENGTH OF THE MINI CAISSON STEEL ITSELF. ALL WELDING ELECTRODES AND PROCEDURES SHALL CONFORM TO "STRUCTURAL WELDING CODE".

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INCLUDING ALL MINI CAISSONS AND SPLICES, DRIVING EQUIPMENT, DRIVING PROCEDURES AND SEQUENCES AND TESTING PROCEDURES.

IF UNDERGROUND OBSTRUCTIONS ARE ENCOUNTERED DURING INSTALLATION, THE CONTRACTOR SHALL HAVE THE OPTION OF REMOVING THE OBSTRUCTION IF POSSIBLE OR RELOCATING THE MINI CAISSON WITH THE ENGINEER'S APPROVAL. THE LATTER OPTION MAY REQUIRE THE RELOCATION OF ADJACENT MINI CAISSONS AND THE ADDITION OF MORE MINI CAISSONS. ALL WORK DUE TO UNDERGROUND OBSTRUCTIONS SHALL BE PAID FOR BY THE CONTRACTOR.

WRITTEN INSTALLATION RECORDS SHALL BE OBTAINED FOR EACH MINI-CAISSON AND SUBMITTED TO THE ENGINEER OF RECORD. THESE RECORDS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PROJECT NAME AND/OR LOCATION.
- DATE AND TIME OF INSTALLATION.
- LOCATION AND REFERENCE NUMBER OF EACH MINI CAISSON.
- MINI CAISSON LOGS SIGNED AND SEALED BY A LICENSED SURVEYOR OR A PROFESSIONAL ENGINEER.
- DESCRIPTION OF STEEL SECTION AND EXTENSIONS INSTALLED.
- OVERALL DEPTH OF INSTALLATIONS REFERENCED FROM BOTTOM OF MINI CAISSON CAP.
- MINI CAISSON DEVIATION PLAN.
- ANY OTHER RELEVANT INFORMATION RELATING TO THE INSTALLATION.
- FOR ADDITIONAL REQUIREMENTS SEE GEOTECHNICAL REPORT.

THE CONTRACTOR SHALL NOT POUR ANY MINI CAISSON CAPS OR BEAMS UNTIL THE ENGINEER OF RECORD AND BUILDING DEPARTMENT HAS APPROVED THE ABOVE DOCUMENTS.

ECCENTRICITIES OR DEVIATIONS OF "AS-BUILT" MINI CAISSON GROUPS SHALL BE ADJUSTED BY STRAPS, ADDITIONAL REINFORCING OR BY ADDITIONAL MINI CAISSONS AS INDICATED ON REDESIGN SHEETS AS PREPARED BY THE STRUCTURAL ENGINEER. STRUCTURAL REDESIGN. ALL NEW WORK AND REDESIGN DUE TO DEVIATED MINI CAISSONS SHALL BE PAID FOR BY THE CONTRACTOR.

FOR MINI CAISSON LOAD TESTING REQUIREMENTS (IF ANY) SEE GEOTECHNICAL REPORT.

A GEOTECHNICAL REPORT DATED JULY 29, 2005 HAS BEEN PREPARED BY PILLORI ASSOCIATES. THE REPORT CONTENTS ARE PART OF THE CONTRACT DOCUMENTS.

SEE SPECIFICATION SECTION "EARTHWORK" AND "MINI-CAISSONS" FOR ADDITIONAL REQUIREMENTS.

STRUCTURAL CONCRETE NOTES:

ALL WORK SHALL COMPLY TO THE ACI CODE, LATEST EDITION, AS AMENDED BY THE BUILDING CODE OF THE CITY OF NEW YORK.

ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WEIGHING 145 PCF HAVING A COMPRESSIVE STRENGTH PER CONCRETE MATERIAL SCHEDULE AT 28 DAYS AND A MAXIMUM WATER-CEMENT RATIO OF 0.45.

STRUCTURAL CONCRETE SHALL CONTAIN A WATER REDUCING, PLASTICIZING ADMIXTURE. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN AN AIR-ENTRAINING ADMIXTURE.

ALL CONCRETE WORK: MIXES, INSPECTIONS, AND FORMWORK SHALL CONFORM TO THE REQUIREMENTS OF THE BUILDING CODE OF THE CITY OF NEW YORK AND ACI CODES.

CONFORM TO ACI HOT AND COLD WEATHER CONCRETING.

CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DESIGN OF CONCRETE MIXES AND FOR MAINTAINING STRENGTH AND PROPER SLUMP DURING CONSTRUCTION. CONCRETE MIXES SHALL BE DESIGNED IN ACCORDANCE WITH METHOD I OR METHOD II AS SPECIFIED IN THE SECTION 27-605 OF THE NEW YORK CITY BUILDING CODE AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO CONCRETE SHALL BE PLACED UNTIL CONCRETE MIXES HAVE BEEN APPROVED BY THE ENGINEER.

SUBMIT TO THE ARCHITECT PROPOSALS FOR ALL PROCEDURES AND SEQUENCES FOR FORM WORK STOPPING AND RESHORING SYSTEMS.

REINFORCING BARS SHALL BE DEFORMED STEEL BARS COMPLYING WITH ASTM A615, GRADE 60.

WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A185 AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 70,000 PSI.

ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE, UNLESS OTHERWISE NOTED. PLACING OF CONCRETE SHALL NOT START UNTIL THE PLACEMENT OF REINFORCING HAS BEEN APPROVED BY THE CONTRACTOR'S INSPECTION AGENCY.

CHECKED SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, SPACING AND PLACEMENT, SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION.

REINFORCING BARS, WELDED WIRE FABRIC, THE WIRE'S AND ACCESSORIES SHALL BE EPOXY COATED FOR CONCRETE WORKS THAT ARE EXPOSED TO WEATHER OR UNDER WATER IN ACCORDANCE WITH ASTM A-775. DAMAGED EPOXY COATING ON REINFORCING MATERIALS SHALL BE TOUCHED UP TO THE ORIGINAL COATING STANDARDS.

SUBMIT DETAILED DRAWINGS, AFTER COORDINATION WITH LATEST ARCHITECTURAL DRAWINGS, SHOWING THE LOCATIONS OF ALL CONSTRUCTION JOINTS, CURBS, SLAB DEPRESSION, SLEEVES, OPENINGS, ETC.

REINFORCING SPLICES SHALL COMPLY WITH ACI 318, BUT SHALL IN NO CASE BE LESS THAN 40 DIAMETERS, UNLESS OTHERWISE NOTED.

MECHANICAL SPLICING IF REQUIRED, SHALL HAVE THE BARS CONNECTED TO DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR. IF MECHANICAL SPLICING IS USED, SUBMIT PRODUCT LITERATURE DESCRIBING AND METHOD OF INSTALLATION.

WELDED WIRE FABRIC SHALL BE LAPPED TWO (2) FULL WESH PANELS AND TIED SECURELY.

WHERE REQUIRED, DOWELS OR SPLICES SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING AND LAP A MIN. OF 48 (UNLESS OTHERWISE NOTED).

PROVIDE POCKETS AND DOWELS FOR ALL BEAMS FRAMING INTO FOUNDATION WALLS, PIERS AND BUTTRESSES AS REQUIRED FOR BEAMS TO HAVE A MIN. BEARING OF 4".

DO NOT PLACE CONCRETE WITHOUT APPROVED SHOP DRAWINGS.

PROVIDE (2) ADDITIONAL #5 BARS AROUND ALL FLOORS AND WALL OPENINGS, AS PER TYPICAL OPENING DETAIL.

CONSTRUCTION JOINTS IN ALL SLABS AND BEAMS SHALL NOT BE FURTHER APART THAN 20 FEET IN ANY DIRECTION. CONSTRUCTION JOINTS IN WALLS SHALL NOT BE FURTHER APART THAN 40 FEET.

ALL CONSTRUCTION JOINTS SHALL BE CLEANED AND MOISTENED IMMEDIATELY PRIOR TO PLACING NEW CONCRETE.

BAR SUPPORTS IN CONTACT WITH EXPOSED SURFACES SHALL BE PLASTIC TIPPED.

NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

SEE ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWNGS FOR ADDITIONAL WALL/SLAB OPENINGS.

SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF ALL FLOOR FINISHES, FLOOR DEPRESSIONS AND CURBS.

CONCRETE SLABS SHALL HAVE A MONOLITHIC FINISH AND SHALL BE SCREEDED, COMPACTED BY ROLLING OR TAMPING, FLOATED OFF AND GRADED AS REQUIRED. AFTER SUFFICIENT HARDENING SLAB SHALL BE PROTECTED AND CURED. START CURING AS SOON AS POSSIBLE WITHOUT MARKING FINISH. COVER SLABS WITH REINFORCED PAPER AS REQUIRED. KEEP SURFACE CONTINUOUSLY MOIST FOR SEVEN DAYS OR USE A CURING COMPOUND.

CONDUITS AND PIPES EMBEDDED IN CONCRETE SHALL CONFORM TO ACI 318 REQUIREMENTS. CONDUITS AND PIPES SHALL NOT BE LARGER THAN 1/3 OF THE SLAB/WALL THICKNESS AND SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER. COORDINATE WITH ARCHITECTURAL, HVAC, ELECTRICAL AND PLUMBING DRAWINGS.

DRY PACK SHALL BE ONE PART SAND, ONE PART CEMENT WITH ENOUGH WATER FOR PLACEMENT.

ALL BEARING GROUT SHALL BE NON-SHRINK, NONMETALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI.

CHAMFER ALL EXPOSED CONCRETE CORNERS UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.

WHEN INSTALLING EXPANSION BOLTS OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACING BOLTS OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.

PATCH CONCRETE WHERE REQUIRED. PATCHING CONCRETE SHALL BE SIKA TOP 122 OR 123 WITH EPOKID PINS WHERE REQUIRED BY MANUFACTURER.

COORD. WITH ARCH. FOR ALL EXPOSED EXTERIOR WALL CONSTRUCTION JOINTS, REVEALS, CONC. FINISH, FORMWORK AND JOINT PATTERN REQUIREMENTS.

CONTRACTOR TO SUBMIT SAMPLES AND MOCK UP OF EXTERIOR WALLS FOR ARCH. REVIEW. COORD. ALL SUBMITTALS WITH ARCH.

ALL REINF. BARS WITHIN EXTERIOR WALL TO BE EPOXY COATED.

STRUCTURAL STEEL NOTES:

DETAILING, FABRICATION AND ERECTION SHALL COMPLY WITH AISC SPECIFICATIONS AND CODES, LATEST EDITIONS AS AMENDED BY THE BUILDING CODE OF THE CITY OF NEW YORK.

STRUCTURAL STEEL W SHAPES SHALL COMPLY WITH ASTM A992 GR. 50 UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL CHANNELS, ANGLES, PLATES AND BARS SHALL BE ASTM A36, UNLESS OTHERWISE NOTED.

STRUCTURAL TUBING SHALL COMPLY WITH ASTM A500, OR B, UNLESS OTHERWISE NOTED.

BOLTS, NUTS AND WASHERS SHALL COMPLY WITH ASTM A325. BOLTS SHALL BE A MINIMUM 3/4 INCH DIAMETER, UNLESS OTHERWISE NOTED.

SUBMIT SHOP DRAWINGS FOR ALL WORK. DO NOT PROCEED WITH ANY FABRICATION UNTIL THE SHOP DRAWINGS ARE REVIEWED AND APPROVED. SHOP DRAWINGS SHALL BE BASED ON FIELD VERIFIED CONDITIONS.

ALLOW FOR A TWO-WEEK REVIEW PERIOD (MIN.) FOR SHOP DRAWINGS, AND TIME ALL SUBMISSIONS ACCORDINGLY.

PROVIDE ANY MEASURES REQUIRED FOR STABILITY OF STRUCTURE DURING ERECTION.

PROVIDE A MINIMUM OF TWO (2) BOLTS PER CONNECTION.

AFTER FABRICATION, CLEAN STEEL OF ALL RUST, LOOSE MILL, SCALE AND OTHER FOREIGN MATERIALS.

ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS AND SHALL CONFORM TO "AWS STRUCTURAL WELDING CODE - STEEL", LATEST EDITION. WELDERS SHALL BE LICENSED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE BUILDING CODE OF THE CITY OF NEW YORK, AND THE RULES AND REGULATIONS OF THE BOARD OF STANDARDS AND APPEALS.

WELDING ELECTRODES SHALL BE E70XX FOR NEW CONSTRUCTION, AND E60 LOW-HYDROGEN FOR EXISTING. MINIMUM FILLET WELDS SHALL COMPLY WITH AISC, BUT SHALL NOT BE LESS THAN 1/4 INCH, UNLESS OTHERWISE NOTED.

PROVIDE FIREPROOF BLANKETS AND OTHER FIRE PROTECTION MEASURES AS REQUIRED FOR FIRE SAFETY DURING WELDING.

SURFACES OF ALL STEEL THAT IS TO RECEIVE WELDS SHALL BE POWER BRUSHED AND CLEANED THOROUGHLY OF ALL FOREIGN WATER AND PAINTED FOR A DISTANCE OF 2 INCHES FROM EACH SIDE OF THE OUTSIDE LINES OF WELD.

EXISTING STEEL BEAMS, GIRDERS AND COLUMNS RECEIVING WELDING FOR NEW CONNECTIONS AND/OR REINFORCING STEEL, SHALL BE TESTED TO VERIFY CLASSIFICATION OF EXISTING STEEL, REQUIRED WELDING PROCEDURES AND ELECTRODES. TESTING SHALL BE BY A TESTING AGENCY RETAINED BY THE CONTRACTOR.

CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE FABRICATOR. DETAIL USING RATIONAL ENGINEERING DESIGN AND STANDARD PRACTICE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE GENERAL DETAILS SHOWN ON THE DRAWINGS ARE CONCEPTUAL ONLY AND DO NOT INDICATE THE REQUIRED NUMBER OF BOLTS OR WELD SIZES, UNLESS SPECIFICALLY NOTED.

ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR'S PROFESSIONAL ENGINEER AND SUBMITTED IN SHOP DRAWING FORM FOR REVIEW. BEAM TO BEAM CONNECTIONS SHALL BE DESIGNED TO TRANSFER THE REACTION FOR A SIMPLY SUPPORTED, UNIFORMLY LOADED BEAM OF SAME SIZE, SPAN AND (FY) AS LISTED IN THE TABLE OF UNIFORM LOAD CONSTANT. AISC MANUAL OF STEEL CONSTRUCTION, LATEST EDITION, OR FOR THE REACTION SHOWN ON THE FRAMING PLAN, WHICHEVER IS GREATER. WHERE NO REACTION IS SHOWN ON THE FRAMING PLAN, CONNECTION SHALL TRANSFER THE REACTION AS NOTED ABOVE. MOMENT CONNECTIONS SHALL DEVELOP THE FULL CAPACITY OF ALL THE JOINED MEMBERS.

ALL FIELD WELDING AREAS SHALL BE TOUCHED UP ON SITE WHERE PAINT IS REQUIRED.

ALL EXPOSED WELDS SHALL BE GROUND SMOOTH, U.O.N.

ALL NEW INTERIOR STEEL SHALL BE PAINTED WITH THE FOLLOWING SYSTEM BY TNEWEC OR EQUAL. (PAINT SYSTEMS TO BE COORDINATED WITH ARCH. DWG'S PRIOR TO ANY WORK AND VERIFIED WITH TNEWEC FOR APPLICABILITY OF INTENDED USE).

Surface Prep: SSPC-SP2 Hand Tool Clean
Primer: 10-99 or 4 Versar, 2-3 mils dft
Intermediate: 2H or 23 Endurstone, 2-3 mils dft
Finish: 2H or 23 Endurstone, 2-3 mils dft

ALL EXTERIOR STEEL SHALL BE PAINTED WITH THE FOLLOWING SYSTEM BY TNEWEC OR EQUAL. (PAINT SYSTEMS TO BE COORDINATED WITH ARCH. DWG'S PRIOR TO ANY WORK AND VERIFIED WITH TNEWEC FOR APPLICABILITY OF INTENDED USE).

Surface Prep: SSPC-SP2 Power Tool Clean
Primer: 10-99 or 4 Versar, 2-3 mils dft
Intermediate: 2H or 23 Endurstone, 2-3 mils dft
Finish: 2H or 23 Endurstone, 2-3 mils dft

ALL EXTERIOR EXPOSURE FIELD WELDING AREAS SHALL BE TOUCHED UP WITH ZINC-RICH PAINT AND A FINAL COAT PER ARCH. SPECIFICATIONS.

ALL EXTERIOR EXPOSURE BOLTS, SHIMS, AND OTHER HARDWARE SHALL BE GALVANIZED AND TOUCHED UP WITH ZINC RICH PAINT. ALL EXTERIOR LINTELS SHALL BE GALVANIZED.

FABRICATE BEAMS WITH THE NATURAL CAMBER UP. PROVIDE CAMBERS AS INDICATED ON THE DRAWINGS.

WHERE STEEL MEMBERS ARE REQUIRED TO BE SPLICED, THE SPLICE SHALL BE MADE TO DEVELOP THE FULL STRENGTH OF THE SECTION AND SUBMITTED IN THE FORM OF A SHOP DRAWING TO THE ENGINEER OF RECORD FOR REVIEW. SUCH SPLICES SHALL NOT INTERFERE WITH ANY ARCHITECTURAL OR MECHANICAL CLEARANCES.

FOR ALL REQUIRED FIREPROOFING. SEE ARCH. DWG'S.

PRIOR TO APPLICATION OF SPRAYED ON FIREPROOFING, THE CONTRACTOR SHALL REMOVE, IN THE FIELD, ALL LOOSE MILL SCALE OR RUST. DO NOT PAINT STEEL IF SPRAY FIREPROOFING IS USED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION PROCEDURES AND SEQUENCES WITH RELATION TO TEMPERATURE DIFFERENTIALS.

ALL ADDITIONAL STEEL REQUIREMENTS BY THE CONTRACTOR FOR ERECTION PURPOSES SHALL BE REMOVED BY THE CONTRACTOR, UNLESS APPROVED BY THE OWNER IN WRITING.

STAIR STRINGERS SHALL HAVE FULL PENETRATION WELDED CONNECTIONS ALL AROUND AT CRANKED SEGMENTS AND GROUND SMOOTH, UNLESS OTHERWISE NOTED.

STAIR DESIGN SHOWN IS CONCEPTUAL. FINAL STAIR DESIGN SHALL BE BY STAIR MANUFACTURER AND HIS/HER DETAILER/ENGINEER LICENSED IN NEW YORK STATE. STAIR DESIGN TO BE SUBMITTED IN THE FORM OF SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS.

GAS CUTTING OF MAIN STRUCTURAL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.

STRUCTURAL METAL DECK NOTES:

FABRICATE METAL DECKING FROM STEEL TYPE ASTM A446, GRADE A, HAVING A MINIMUM YIELD STRENGTH OF 55,000 PSI. HOT DIPPED GALVANIZED.

SUBMIT, TO THE ARCHITECT, PUBLISHED MANUFACTURER'S DATA VERIFYING THE SPECIFIED DECK REQUIREMENTS. SUBMIT ENGINEERED AND CHECKED SHOP DRAWINGS INDICATING LOCATION, GAUGE AND SIZE OF EACH PIECE OF DECKING. SHOP DRAWINGS SHALL CLEARLY SHOW FASTENING/WELDING DETAILS TO STRUCTURAL FRAMING, SIDE LAP CONNECTION DETAILS AND SUPPLEMENTARY SUPPORT STEEL AS REQUIRED.

WELD METAL DECKING AT 12 INCHES MAXIMUM ON CENTER TO THE SUPPORTING STEEL. FASTEN SIDE LAPS AT 30 INCHES MAXIMUM ON CENTER.

PROVIDE CONTINUOUS STEEL METAL CLOSURES AT ALL SLAB OPENINGS AND SLAB EDGES AND CONTINUOUS DECK CLOSURE AT ALL SHEET ENDS.

DECK SHALL BE OF A MIN. OF TWO (2) SPANS CONTINUOUS.

MASONRY NOTES:

ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE NATIONAL CONCRETE MASONRY ASSOCIATION AND THE STRUCTURAL CLAY PRODUCTS INSTITUTE AND THE NEW YORK CITY BUILDING CODE.

MATERIALS:

(A) HOLLOW LOAD BEARING CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE 1. THE MASONRY ASSEMBLY SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTHS (F'W) OF 1,300 PSI WITH A MINIMUM UNIT STRENGTH OF 4,000 PSI, UNLESS PRISM TESTS ARE CONDUCTED SUCCESSFULLY WITH LOWER STRENGTH CMU.

(B) GROUT FOR LOAD BEARING MASONRY SHALL CONFORM TO ASTM C476-6, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

(C) ALL MORTAR SHALL CONFORM TO ASTM C270, TYPE S.

(D) REINFORCING BARS FOR REINFORCED MASONRY SHALL CONFORM TO ASTM A615-60.