DESIGN DATA:

- 1. ALL WORK SHALL COMPLY WITH THE 2020 NEW YORK STATE BUILDING CODE WITH SUPPLEMENTS AND THEIR REFERENCE STANDARDS.
- 2. DESIGN BASIS/GOVERNING CODE: NYS BUILDING CODE AND REFERENCE STANDARDS CLASSIFICATION CATEGORY: RISK CATEGORY

SERVICE BUILDING DESIGN LOADS-	
LIVE LOADS: UNIFORM LOAD	100psf
DEAD LOADS: FLOOR	50psf
SNOW LOAD: GROUND SNOW LOAD (Pg) FLAT ROOF SNOW LOAD (Pf) IMPORTANCE FACTOR (Is) EXPOSURE FACTOR (Ce) THERMAL FACTOR (Ct)	40psf 32psf 1.1 B 1.1
WIND LOAD: ULTIMATE WIND SPEED IMPORTANCE FACTOR (IW) EXPOSURE CATEGORY	115mph 1.1 B

GENERAL NOTES:

SEISMIC DESIGN DATA:

- 1. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
- 2. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- 3. DESIGN AND CONSTRUCTION PER THE 2020 NEW YORK STATE BUILDING CODE, SUPPLEMENTS, AND THE REFERENCE STANDARDS AND ALL OTHER APPLICABLE CODES, ORDINANCES AND
- 4. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE UNDERGROUND
- 5. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE THEIR WORK WITH THE WORK OF OTHERS.
- 6. PROVIDE AND INSTALL ALL MATERIALS IN ACCORDANCE WITH RECOGNIZED GOOD STANDARD
- 7. THE CONTRACTOR SHALL VERIFY ALL UTILITY SERVICES PRIOR TO INTERRUPTION.
- 8. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW AND APPROVAL BY THE ENGINEER.
- 9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ALL PROPOSED DEVIATIONS OR SUBSTITUTIONS FROM THE DIMENSIONS, MATERIALS OR EQUIPMENT SHOWN ON THE DRAWINGS AND MAKE ONLY THOSE DEVIATIONS OR SUBSTITUTIONS ACCEPTABLE TO THE ENGINEER.
- 10. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS OF EXISTING SITE THAT ARE AFFECTED BY NEW WORK BEFORE PROCEEDING WITH FABRICATION AND CONSTRUCTION.
- 11. CONTRACTOR SHALL KEEP WORK AREA CLEAN, HAZARD FREE, AND REMOVE EQUIPMENT NOT
- 12. SWEEP THE CONSTRUCTION AREA BROOM CLEAN AT THE END OF EACH WORKING DAY.

SPECIFIED AS REMAINING ON THE PROPERTY.

- 13. CONTRACTOR SHALL CONDUCT ACTIVITIES ASSOCIATED WITH THIS WORK IN A MANNER CONSISTENT WITH ANY AND ALL REQUIREMENTS OF THE SITE OWNER/OPERATOR INCLUDING, BUT NOT LIMITED TO, SITE USE, PROTECTION OF PERSONS AND PROPERTY, WASTE CONTAINMENT, SITE SECURITY,
- 14. UNLESS OTHERWISE DIRECTED BY THESE CONSTRUCTION DRAWINGS, OR ALLOWED BY THE AUTHORITIES HAVING JURISDICTION, ALL EXISTING FACILITIES SHALL BE PROTECTED AND SHALL REMAIN IN SERVICE AND ACCESSIBLE
- 15. CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL NON-OWNER PROVIDED EQUIPMENT AND FABRICATIONS TO BE USED IN CONSTRUCTION. CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS. INCLUDING THOSE REQUIRED FROM SUB—CONTRACTORS. SHOP DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTAL TO THE ENGINEER FOR REVIEW. DESIGN CHANGE AND SUBSTITUTION REQUESTS SHALL BE CLEARLY NOTED OR SUBMITTAL MAY BE REJECTED UPON RECEIPT. ALLOW TEN DAYS FOR REVIEW.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY REQUIREMENTS FROM THE TIME THE CONTRACT IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER AND ENGINEER.
- 17. WHEN DISTURBED, EXISTING FACILITIES SHALL BE REPAIRED OR REPLACED IN KIND AND IN ACCORDANCE WITH THE REQUIREMENTS OR DIRECTION OF THE AUTHORITY HAVING JURISDICTION. ASSOCIATED COSTS SHALL BE BORNE BY THE CONTRACTOR.

18. CONTRACTOR SHALL PLAN AND COORDINATE THIRD PARTY INSPECTIONS REQUIRED BY STATE OR

- LOCAL AUTHORITIES, THE OWNER, OR THE ENGINEER. A MINIMUM 48 HOUR NOTICE SHALL BE PROVIDED TO THE INSPECTOR. UNLESS OTHERWISE ARRANGED. 19. CONTRACTOR IS TO REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT
- SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO EACH SUB-CONTRACTOR AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- 20. SHOULD ANYTHING BE OMITTED FROM THESE PLANS WHICH IS NECESSARY FOR A COMPLETE UNDERSTANDING OF THE WORK, CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER.
- 21. WRITTEN DIMENSIONS ON THE PLANS HAVE PRECEDENCE OVER SCALED DIMENSIONS.
- 22. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE SAME PROVISIONS AND ANY OTHER APPLICABLE CODES, RULES, AND REGULATIONS, WEATHER SHOWN ON THE PLANS OR NOT.

CONSTRUCTION NOTES

- 1. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES, OR REGULATIONS TAKE PRECEDENCE.
- 2. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 3. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION W/THE PROJECT MANAGER AND WITH OWNER AUTHORIZED REPRESENTATIVE.
- 4. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK SUBJECT TO OWNER APPROVAL.
- 5. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, SURFACES, ETC., AND UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF THE OWNER.

FOUNDATIONS/EARTHWORK:

- 1. THE FOUNDATION DESIGN IS BASED ON A GENERAL KNOWLEDGE OF THE AREA AND THE CODE DEFINED ALLOWABLE LOADS.
- 2. FOUNDATION EXCAVATIONS SHALL BE PROPERLY SLOPED OR BENCHED TO PROVIDE SAFE
- 3. EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 4'-0" BELOW THE SURROUNDING FINISHED GRADE.

4. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.

- 5. DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND.
- 6. SOIL BEARING SURFACES PREVIOUSLY ACCEPTED BY THE ENGINEER, WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN OR DISTURBED SHALL BE REWORKED TO THE SATISFACTION OF THE ENGINEER.
- 7. BEAR FOOTINGS ON COMPACTED STRUCTURAL FILL.
- 8. CENTER FOOTINGS UNDER WALLS, PIERS OR COLUMNS, UNLESS NOTED OTHERWISE.
- 9. DOWEL CONCRETE WALLS AND PIERS INTO FOOTINGS WITH DOWELS THE SAME SIZE AND SPACING AS VERTICAL REINFORCEMENT. EXTEND DOWELS TO WITHIN 3 INCHES OF BOTTOM OF FOOTING, TERMINATEI WITH ACI STANDARD 90 DEGREE HOOK. LAP PER TABLE WITH VERTICAL REINFORCEMENT, UNLESS

CONCRETE NOTES:

- 1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
- 2. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
- 3. REINFORCING STEEL SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL BE OVERLAPPED A MINIMUM OF 6".
- 4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS: A. CONCRETE CAST IN EARTH: 3"
 - B. CONCRETE EXPOSED TO EARTH OR WEATHER: 1. #6 AND LARGER: 2"

2. #5 AND SMALLER & WWF: 1 1/2"

- 5. INSTALLATION OF CONCRETE ANCHORS, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDATIONS. THE ANCHOR BOLT, DOWEL, OR ROD, SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR
- ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. 6. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
- 7. CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
- 8. DO NOT TACKWELD REINFORCING STEEL.
- 9. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE THE START OF
- 10. LOCATE ADDITIONAL CONSTRUCTION JOINTS AS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGHOUT JOINT.
- 11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- 12. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING, DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
- 13. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.

SHOWN PERTAINS TO TYPICAL CONDITIONS

- 14. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OF FOR 14 DAYS AFTER PLACEMENT.
- 15. PROVIDE \$\frac{3}{4}" CHAMFER AT ALL EXPOSED CONCRETE CORNERS UNLESS NOTED OTHERWISE. CHAMFERED CORNERS SHALL BE INCLUDED AT ALL GARAGE PIERS. EDGES AND FINS SHALL BE
- 16. REINFORCE CONCRETE ELEMENTS INCLUDING FOOTINGS, WALLS, PIERS AND SLABS. REINFORCEMENT
- 17. PROVIDE KEYS IN CONCRETE WALLS, PIERS AND FOOTINGS AT INTERSECTION OF MASONRY OR CONCRETE, UNLESS NOTED OTHERWISE.
- 18. PIPING, CONDUIT AND DUCT PENETRATIONS THROUGH WALLS SHALL BE SLEEVED. NO CORE DRILLING OF WALLS IS PERMITTED. PENETRATIONS ARE NOT PERMITTED THROUGH PIERS.
- 19. WHERE FOUNDATION WALLS ARE TO BE BACKFILLED ON BOTH SIDES, CONCRETE SHALL ATTAIN A MINIMUM STRENGTH OF 75% I'C BEFORE PLACING BACKFILL. WHERE WALLS ARE BACKFILLED ON ONE SIDE ONLY, CONCRETE ATTAIN A MINIMUM STRENGTH OF 100% I'C BEFORE PLACING BACKFILL
- 20. WHERE CONCRETE WILL BE EXPOSED IN THE FINISHED PROJECT, ALL FORM TIES SHALL BE REMOVED. TIE HOLES FILLED, VOIDS & BUG HOLES FILLED. THE CONCRETE SURFACE SHALL BE RUBBED SMOOTH TO REMOVE FINS, PROTRUSIONS, HIGH SPOTS, FORM MARKINGS, ETC
- 21. WHERE CONCRETE WILL BE COVERED WITH A MASONRY FACADE, INSTALL CAST-IN-PLACE DOVETAIL SLOTS FOR THE FULL HEIGHT OF THE SURFACE TO BE FINISHED. SPACE SLOTS 16" ON-CENTER.

SPECIFICATIONS

PECIFICATION NOTES

- . THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR, AND INCIDENTAL TO, CONSTRUCTION OF THE WORK AS DEFINED HEREIN.
- B. THE CONTRACTOR SHALL ACCEPT THE SITE IN THE CONDITION IN WHICH IT EXISTS AT THE
- TIME OF THE AWARD OF THE CONTRACT. THE ENGINEER SHALL DETERMINE THE SUITABILITY OF MATERIALS THAT ARE TO BE USED IN THE WORK AND SHOULD ANY MATERIALS ENCOUNTERED BE UNSATISFACTORY FOR THE PURPOSE INTENDED, THEY SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S
- D. NOTIFY THE ENGINEER OF ANY UNEXPECTED CONDITIONS THAT WILL AFFECT THE WORK. QUALITY ASSURANCE
- A. THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL COSTS IN CONNECTION WITH AN APPROVED INDEPENDENT TESTING FACILITY TO DETERMINE CONFORMANCE OF MATERIALS

WITH THE SPECIFICATIONS.

WORKING DAYS OF RECEIPT.

- A. SAMPLES: THE CONTRACTOR SHALL FURNISH MATERIAL SAMPLES TO THE TESTING LABORATORY FOR ANALYSIS AND REPORT, AS DIRECTED BY THE ENGINEER, OR AS OUTLINED IN THE SPECIFICATIONS.
- B. SHOP DRAWINGS: PROVIDE PRODUCT CUT-SHEETS AND SHOP DRAWINGS TO THE ENGINEER FOR REVIEW, FOR ALL PRODUCTS AND MATERIALS TO BE INSTALLED IN THE
- C. TEST RESULTS: THE TESTING LABORATORY SHALL SUBMIT WRITTEN REPORTS OF ALL
- TESTS, INVESTIGATIONS, AND RECOMMENDATIONS TO THE ENGINEER. D. ALL SAMPLES, SHOP DRAWINGS, AND TEST RESULTS SHALL BE DELIVERED TO THE ENGINEER NO LATER THAN 14 WORKING DAYS PRIOR TO THE INSTALLATION OF SUCH PRODUCT. THE ENGINEER SHALL REVIEW AND RETURN THE SUBMITTALS WITHIN 10

PROTECTION OF SITE

- A. LOCATE EXISTING UTILITIES IN AREAS OF WORK. IF UTILITIES ARE TO REMAIN IN PLACE, PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING ALL WORK OPERATIONS. COMPLY WITH OSHA REQUIREMENTS.
- B. COORDINATE INTERRUPTION AND/OR TERMINATION OF UTILITIES WITH THE UTILITY COMPANIES AND THE OWNER. PROVIDE A MINIMUM OF 48 HOURS NOTICE TO THE OWNER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING
- C. REPAIR ANY DAMAGED UTILITIES AS ACCEPTABLE TO THE ENGINEER, AT NO ADDITIONAL
- D. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND POST WITH WARNING SIGNS.
- E. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY WORK OPERATIONS

. EARTHWORK

A. SELECT STRUCTURAL FILL: SOUND, DURABLE, SAND, GRAVEL, STONE, OR BLENDS OF THESE MATERIALS, FREE FROM ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIALS, CONFORMING TO THE REQUIREMENTS OF NYSDOT SECTION 203-2.02C AND MEETING THE FOLLOWING GRADATION REQUIREMENTS SIEVE PERCENT PASSING

FINES PASSING NO. 200 SHALL BE NON-PLASTIC. PARTICLE SIZE ANALYSIS SHALL SHOW NO GAP GRADING.

B. CRUSHED STONE: FREE FROM ORGANICS, ELONGATED PARTICLES OR OTHER DELETERIOUS MATERIALS, CONFORMING TO THE REQUIREMENTS OF NYSDOT SECTION 703-2 AND MEETING THE FOLLOWING GRADATION (NYSDOT, SIZE 2): PERCENT PASSING

C. SELECT GRANULAR MATERIAL: SOUND, DURABLE, SAND, GRAVEL, STONE OR BLENDS WITH THESE MATERIALS, FREE FROM ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIALS, CONFORMING TO THE REQUIREMENTS OF NYSDOT SECTION 304 AND MEETING THE FOLLOWING GRADATION (NYSDOT TYPE 4): SIFVF PERCENT PASSING

30 - 655-40

- D. GEOTEXTILE: SUPAC 8NP BY PHILLIPS FIBERS CORPORATION, OR EQUAL.
- E. SELECT GRANULAR MATERIAL SHALL BE USED IN LIEU OF SELECTED FILL AS DIRECTED BY THE ENGINEER.
- A. EXCAVATE IN ACCORDANCE WITH LINES AND LEVELS SHOWN ON THE DRAWINGS AND AS NECESSARY FOR THE WORK. EXCAVATION LINES SHALL BE SUCH THAT SUFFICIENT CLEARANCE EXIST FOR THE PROPER EXECUTION OF THE WORK.
- B. MAINTAIN THE SLOPES OF EXCAVATION IN SAFE CONDITION UNTIL COMPLETION OF THE BACKFILLING OPERATION, IN ACCORDANCE WITH OSHA REQUIREMENTS.
- C. TRIM EXCAVATIONS TO THE REQUIRED LEVELS, AND LEAVE FREE FROM LOOSE OR ORGANIC MATTER. FILL OVER EXCAVATED AREAS UNDER STRUCTURE WITH MATERIAL AS APPROVED BY THE ENGINEER.
- D. WHEN THE EXCAVATION HAS REACHED THE REQUIRED DEPTH, CONTRACTOR SHALL REQUEST APPROVAL OF THE BEARING SURFACE BY THE OWNER'S REP.
- E. SLOPING SURFACES UNDER THE WORK WHERE REQUIRED, SHALL BE CUT IN STEPS AS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER.
- F. ANY EXCESS EXCAVATION SHALL BE REMOVED FROM THE SITE TO DISPOSAL AREAS AT THE CONTRACTOR'S EXPENSE.
- A. PERFORM DEWATERING OPERATIONS TO MAINTAIN DRY WORKING CONDITIONS.
- B. PREVENT SURFACE, SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATION AND FROM FLOODING PROJECT AND SURROUNDING AREAS.
- STRUCTURAL FILL, BACKFILL, AND COMPACTION

DRAINAGE AND DEWATERING

A. PLACE FILL AS DETAILED. ALL BACKFILL SHALL BE SELECTED FILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR SHOWN ON THE DRAWINGS. B. AFTER APPROVAL OF THE SUBGRADE BY THE OWNER'S REP., THE GEOTEXTILE SHALL BE

PLACED, WHERE SHOWN ON THE DRAWINGS, UPON THE SUBGRADE IN ACCORDANCE WITH

- THE MANUFACTURER'S INSTRUCTIONS AND THE FOLLOWING: 1. INSTALL PRIOR TO PLACEMENT OF THE FIRST COURSE OF STRUCTURAL FILL.
- 2. JOIN BY EITHER SEWING OR OVERLAPPING. SEWN SEAMS SHALL BE LAPPED A MIN. OF 4 INCHES AND DOUBLE SEWN WITH NYLON OR POLYPROPYLENE. OVERLAPPING SEAMS SHALL HAVE A MIN. LAP OF 18 INCHES, EXCEPT WHEN PLACED UNDERWATER WHERE THE OVERLAP SHALL BE A MIN. OF 3 FEET
- 3. FABRIC WHICH IS TORN OR DAMAGED SHALL BE REPLACED OR PATCHED. THE PATCH SHALL EXTEND 3 FEET BEYOND PERIMETER OF THE TEAR OR DAMAGE.
- 4. TRAFFIC OR CONSTRUCTION EQUIPMENT SHALL NOT BE PERMITTED DIRECTLY ON THE FABRIC. MAINTAIN A MINIMUM OF 8 INCHES LOOSE THICKNESS OF FILL ABOVE STABILIZATION FABRIC SUBJECT TO TRAFFIC.
- C. PLACE MATERIALS IN LAYERS NOT MORE THAN 12" IN LOOSE DEPTH, LIFT HEIGHT SHALL BE GOVERNED BY THE ABILITY OF THE COMPACTION EQUIPMENT TO OBTAIN THE REQUIRED COMPACTION. MOISTEN OR AERATE EACH LAYER AS NECESSARY TO FACILITATE COMPACTION. DO NOT PLACE MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST, ICE, PONDED WATER OR DEBRIS.

- D. WHEN WORK IS SUSPENDED DURING PERIODS OF FREEZING WEATHER, PREVENT FILL ALREADY IN PLACE FROM FREEZING. UPON RESUMPTION OF WORK AFTER INCLEMENT WEATHER, PREPARE THE EXPOSED SURFACE BY PROOF ROLLING TO IDENTIFY ANY ZONES OF SOFT/LOOSE SOILS. SOFT/LOOSE MATERIALS OR FROZEN SOILS SHALL BE REMOVED
- E. ALL FILL SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DENSITY.

AND REPLACED AT THE CONTRACTOR'S EXPENSE.

- F. IF THE SURFACE OF ANY LAYER BECOMES CONTAMINATED BY MUD OR UNSUITABLE
- MATERIALS, THE CONTAMINATED SOIL SHALL BE REMOVED. G. FILL PLACEMENT SHALL BE SUSPENDED WHEN WET WEATHER PREVENTS PROPER
- OPERATION OF COMPACTION EQUIPMENT.
- H. ADJACENT TO STRUCTURES, FILL SHALL BE PLACED IN A MANNER WHICH WILL PREVENT DAMAGE TO THE STRUCTURES AND WILL ALLOW THE STRUCTURES TO ASSUME THE LOADS FROM THE FILL GRADUALLY AND UNIFORMLY.
- I. NO BACKFILLING OR COMPACTION SHALL TAKE PLACE AGAINST ANY CAST-IN- PLACE CONCRETE PRIOR TO ACHIEVING THE DESIRED DESIGN STRENGTH. HEAVY EQUIPMENT AND VIBRATORY COMPACTORS SHALL NOT BE OPERATED WITHIN 4 FEET OF ANY
- J. EXCAVATED MATERIAL MEETING THE REQUIREMENTS OF SELECTED FILL SHALL BE RE-USED FOLLOWING OBTAINING THE REQUIRED MOISTURE CONTENT.

QUALITY CONTROL

A. PRF-CONSTRUCTION:

METHODS:

THAT MATERIAL.

- 1. SUBMIT TO THE TESTING AGENCY A 100-POUND MINIMUM SAMPLE FROM EACH SOURCE. IF DIFFERENT MATERIAL GRADATIONS EXIST IN THE PIT, SAMPLES SHALL BI OBTAINED FOR EACH MATERIAL. SAMPLES SHALL BE MIXED AND REDUCED TO TEST
- SPECIMEN SIZE, IN ACCORDANCE WITH AASHTO T87. THE TESTS SHALL BE PERFORMED IN THE ORDER SHOWN. FAILURE TO PASS ANY TEST IS GROUNDS FOR DISQUALIFICATION AND SHALL LEAD TO CESSATION OF THE TEST PROGRAM FOR
- A. PARTICIE SIZE ANALYSIS:
- a. METHOD: AASHTO D422. b. NUMBER OF TESTS: ONE (1) PER POTENTIAL SOURCE. c. ACCEPTANCE: GRADATION WITHIN SPECIFIED LIMITS.
- B. MAXIMUM DENSITY DETERMINATION:
- a. METHOD: ASTM D698, STANDARD PROCTOR. b. NUMBER OF TESTS: ONE (1) PER POTENTIAL SOURCE.
- 2. RE-ESTABLISH GRADATION AND MAXIMUM DENSITY OF FILL MATERIAL IF SOURCE IS CHANGED DURING CONSTRUCTION.
- 1. NOTIFY ENGINEER AT LEAST ONE WORKING DAY PRIOR TO ALL PHASES OF FILLING
- AND BACKFILLING OPERATIONS.ALL BE 2. COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING
- a. METHOD: AASHTO T191, SAND CONE METHOD AASHTO T238, NUCLEAR METHOD b. NUMBER OF TESTS: ONE (1) PER 8" VERTICAL LIFT.
- C. THE ENGINEER MAY DIRECT ADDITIONAL TESTS TO ESTABLISH GRADATION, MAXIMUM DENSITY, AND IN-PLACE DENSITY AS REQUIRED BY WORKING CONDITIONS, AT THE CONTRACTOR'S EXPENSE.
- D. ACCEPTANCE CRITERIA: THE SOLE CRITERION FOR ACCEPTABILITY OF IN-PLACE FILL SHALL BE IN-SITU DRY DENSITY. MINIMUM DRY DENSITY FOR ALL FILL OR BACKFILL SHALL BE 95 PERCENT OF THE MAXIMUM DRY DENSITY. IF A TEST FAILS TO QUALIFY, THE FILL SHALL BE FURTHER COMPACTED AND RE-TESTED. SUBSEQUENT TEST FAILURES SHALL BE FOLLOWED BY REMOVAL AND REPLACEMENT OF THE MATERIAL.

6. CONCRETE

SUBMITTALS

- A. PRODUCT DATA FOR PROPRIETARY MATERIALS, INCLUDING REINFORCEMENT AND FORMING ACCESSORIES, ADMIXTURES, JOINT SYSTEMS, CURING COMPOUNDS, AND
- B. SHOP DRAWINGS FOR REINFORCEMENT, FABRICATION, AND PLACEMENT OF CONCRETE REINFORCEMENT. COMPLY WITH ACI SP-66 (88), "ACI DETAILING MANUAL".
- C. LABORATORY TEST REPORTS FOR CONCRETE MATERIALS AND MIX DESIGN TESTS. QUALITY ASSURANCE
- A. CODES AND STANDARDS: COMPLY WITH THE FOLLOWING:
- 2. CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE." 3. ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS."

B. CONCRETE TESTING SERVICE: ENGAGE A TESTING LABORATORY TO PERFORM

MATERIAL TESTS AND TO DESIGN CONCRETE MIXES. C. NOTIFY THE OWNER'S REPRESENTATIVE 48 HOURS BEFORE PLACING CONCRETE TO ALOW FOR INSPECTION OF FORMWORK, REINFORCING, AND RELATED ITEMS PRIOR TO CONCRETE PLACEMENT.

PRODUCTS

A. FORM MATERIALS:

- 1. EXPOSED: PLYWOOD, METAL, OR OTHER PANEL-TYPE MATERIALS, TO PROVIDE CONTINUOUS, STRAIGHT, SMOOTH, SURFACES. USE OVERLAID PLYWOOD COMPLYING
- PS-1 "A-C OR B-B HIGH DENSITY OVERLAID CONCRETE FORM," CLASS I. 2. UNEXPOSED: PLYWOOD, LUMBER, METAL, OR OTHER MATERIAL. PROVIDE LUMBER
- DRESSED ON 2 EDGES AND ONE SIDE FOR TIGHT FI 3. CYLINDRICAL COLUMNS: PAPER OR FIBER TUBES OF LAMINATED PLIES WITH WATER
- RESISTANT ADHESIVE AND WAX-IMPREGNATED EXTERIOR FOR MOISTURE PROTECTION. 4 FORM COATINGS: COMPOUNDS WITH A MAXIMUM VOC OF 350 MG/L 5. FORM TIES: FACTORY-FABRICATED, ADJUSTABLE-LENGTH, REMOVABLE OR SNAP-OFF METAL FORM TIES. PROVIDE TIES THAT, LEAVE HOLES NOT LARGER

THAN 1-INCH DIAMETER IN CONCRETE SURFACE. B. REINFORCING MATERIALS:

- 1. REINFORCING BARS: ASTM A 615, GRADE 60, DEFORMED.
- 2 STEFL WIRE: ASTM A 82. PLAIN. COLD-DRAWN STEEL. 3. WELDED WIRE FABRIC: ASTM A 185. 4. WELDED DEFORMED STEEL WIRE EABRIC: ASTM A 497.

5. SUPPORTS FOR REINFORCEMENT: WIRE-BAR-TYPE SUPPORTS COMPLYING WITH CRSI SPECS.

- C. CONCRETE MATERIALS
- 1. PORTLAND CEMENT: ASTM C 150, TYPE I OR TYPE II. 2. NORMAL WEIGHT AGGREGATES: ASTM C 33.
- WATER: DRINKABLE. 4. ADMIXTURES, GENERAL: PROVIDE ADMIXTURES THAT CONTAIN NOT MORE THAN 0.1

PERCENT CHI ORIDE IONS. 5. AIR-FNTRAINING: ASTM C 260 6. WATER-REDUCING ADMIXTURE: ASTM C 494.

- D. RELATED MATERIALS 1. ABSORPTIVE COVER: JUTE OR KENAF BURLAP, COMPLYING WITH AASHTO M 182.
- 2. MOISTURE-RETAINING COVER: WATERPROOF PAPER, POLYETHYLENE FILM, OR POLYETHYLENE-COATED BURLAP COMPLYING WITH ASTM C 171
- BONDING COMPOUND: POLYVINYL ACETATE OR ACRYLIC BASE A. "SUPERIOR CONCRETE BONDER," DAYTON SUPERIOR CORP. B. "EUCO WELD," EUCLID CHEMICAL CO.
- C. "WELD-CRETE." LARSEN PRODUCTS CORP.
- 4. EPOXY ADHESIVE: ASTM C 881. PROVIDE MATERIAL "TYPE," "GRADE," AND "CLASS" TO SUIT PROJECT REQUIREMENTS.

A. "EUCO EPOXY #700." EUCLID CHEMICAL CO.

- A "CONCRESIVE 1001." MASTER BUILDERS, INC B. "SIKADUR 32 HI-MOD," SIKA CORP. 5. EPOXY JOINT FILLER: 100% SOLID SEMI-RIGID EPOXY COMPOUND WITH A MIN SHORE D HARDNESS OF FIFTY (50) ACCEPTABLE ARE:
- B. "SIKADUR LO-MOD MORTAR," SIKA CHEMICAL CORP. 6. PREFORMED JOINT FILLER: ASTM D1751 M FEDERAL SPECIFICATION TT-S-227.

7. JOINT SEALER: CONFORM TO ASTM D1850 OR FEDERAL SPECIFICATION SS-S-1401.

DESIGN OF MIXES

BELOW 50 DEGREES.

- A. PREPARE DESIGN MIXES AS SPECIFIED IN ACI 301.
- B. DESIGN MIXES TO PROVIDE NORMAL WEIGHT CONCRETE WITH THE FOLLOWING PROPERTIES: 3000-PSI, 28-DAY COMPRESSIVE STRENGTH; W/C RATIO, 0.58 MAXIMUM (NON-AIR-ENTRAINED), 0.45 MAXIMUM (AIR-ENTRAINED).
- C. USE NONCHLORIDE ACCELERATING ADMIXTURE IN SLABS PLACED AT TEMPERATURES
- D. USE AIR-ENTRAINING ADMIXTURE IN EXTERIOR CONCRETE. ADD AIR-ENTRAINING ADMIXTURE AT MANUFACTURER'S PRESCRIBED RATE TO RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING TOTAL AIR CONTENT OF 4.5% WITH A TOLERANCE OF PLUS OR MINUS 1-1/2%. CONCRETE NOT EXPOSED TO FREEZING, SHALL HAVE 2%
- E. SLUMP LIMITS: AS FOLLOWS: 1. RAMPS, SLABS, AND SLOPING SURFACES: NOT MORE THAN 3 INCHES. 2. REINFORCED FOUNDATION SYSTEMS: BETWEEN 1 INCH AND 3 INCHES. 3. OTHER CONCRETE: NOT MORE THAN 4 INCHES.
- F. READY-MIX CONCRETE: COMPLY WITH REQUIREMENTS OF ASTM C 94.
- A. WELDING OR TACKWELDING OF REINFORCEMENT SHALL NOT BE ALLOWED.
- B. CONSTRUCTION JOINTS: LOCATE AND INSTALL CONSTRUCTION JOINTS AS INDICATED OR, IF NOT INDICATED, LOCATE SO AS NOT TO IMPAIR STRENGTH AND APPEARANCE
- OF THE STRUCTURE, AS ACCEPTABLE TO ENGINEER. C. USE BONDING AGENT ON EXISTING CONCRETE SURFACES THAT WILL BE JOINED WITH
- FRESH CONCRETE. D. CONCRETE PLACEMENT: COMPLY WITH ACI 304, "RECOMMENDED PRACTICE FOR

MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE," AND AS HEREIN

- E. FLOAT FINISH: APPLY FLOAT FINISH TO SLABS. F. TROWEL FINISH: APPLY TROWEL FINISH TO SLABS EXPOSED TO VIEW AND SURFACES TO BE COVERED WITH RESILIENT FLOORING, CARPET, CERAMIC OR QUARRY TILE,
- G. NONSLIP BROOM FINISH: APPLY NONSLIP BROOM FINISH TO EXTERIOR CONCRETE PLATFORMS, STEPS, AND RAMPS, AND ELSEWHERE AS INDICATED.

CONCRETE CURING AND PROTECTION

OPERATIONS ARE COMPLETE.

TEST SPECIMENS.

A. PROVIDE MOISTURE CURING BY FOLLOWING METHODS. 1. KEEP CONCRETE SURFACE WET BY COVERING WITH WATER.

PAINT, OR OTHER THIN FILM FINISH COATING SYSTEM.

- . USE CONTINUOUS WATER-FOG SPRAY. 3. COVER SURFACE WITH SPECIFIED ABSORPTIVE COVER, SATURATE COVER WITH WATER, AND KEEP CONTINUOUSLY WET.
- B. PROVIDE CURING AND SEALING COMPOUND TO SLABS, WALKS, AND CURBS. APPLY SPECIFIED CURING AND SEALING COMPOUND TO CONCRETE AS SOON AS FINISHING
- QUALITY CONTROL TESTING DURING CONSTRUCTION A. THE CONTRACTOR WILL EMPLOY A TESTING AGENCY TO PERFORM TESTS AND TO SUBMIT TEST REPORTS. SAMPLING AND TESTING FOR QUALITY CONTROL DURING
- 1. SAMPLING FRESH CONCRETE: ASTM C 172, EXCEPT MODIFIED FOR SLUMP TO COMPLY WITH ASTM C 94. A. SLUMP: ASTM C 143; ONE TEST AT POINT OF DISCHARGE FOR EACH DAY'S

PLACEMENT OF CONCRETE MAY INCLUDE THE FOLLOWING, AS DIRECTED BY ENGINEER.

- POUR AND EACH SET OF COMPRESSIVE STRENGTH TEST SPECIMENS B. AIR CONTENT: ASTM C 173, VOLUMETRIC METHOD FOR NORMAL WEIGHT CONCRETE; ASTM C 231 PRESSURE METHOD FOR NORMAL WEIGHT CONCRETE; ONE FOR EACH DAY'S POUR AND EACH SET OF COMPRESSIVE STRENGTH
- C. CONCRETE TEMPERATURE: EACH TIME A SET OF COMPRESSION TEST SPECIMENS IS MADE. D. COMPRESSIVE STRENGTH TESTS: ASTM C 39; ONE SET FOR EACH DAY'S POUR EXCEEDING 5 CU. YDS. PLUS ADDITIONAL SETS FOR EACH 50 CU. YDS. MORE THAN THE FIRST 25 CU. YDS. OF EACH CLASS PLACED IN ANY DAY;
- OR FOR EACH 5,000 SF OF SURFACE AREA PLACED ONE TESTED AT 7 DAYS, TWO SPECIMENS TESTED AT 28 DAYS, AND ONE SPECIMEN RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED. E. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN 5 STRENGTH TESTS FOR A GIVEN CLASS OF CONCRETE, CONDUCT TESTING FROM AT LEAST 5

RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN 5 ARE

2. TEST RESULTS WILL BE REPORTED IN WRITING TO ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX

PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE

OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS. 7. STRUCTURAL STEEL

- SUBMITTALS
- A. PRODUCT DATA FOR PROPRIETARY MATERIALS, INCLUDING BOLTS, ANCHOR BOLTS, PRIMER, PAINT, AND OTHERS AS REQUESTED BY THE ENGINEER.
- B. SHOP DRAWINGS FOR ALL STRUCTURAL MEMBERS, FABRICATION, AND PLACEMENT. C. LABORATORY TEST REPORTS FOR STEEL MATERIALS.
- A. CODES AND STANDARDS: COMPLY WITH THE FOLLOWING:
- 1. GENERAL: AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND 2. WELDING: AWS D1.1 "STRUCTURAL WELDING CODE", LATEST EDITION
- B CONTRACTOR SHALL FUGACE AN INDEPENDENT TESTING AND INSPECTION AGENCY TO INSPECT HIGH-STRENGTH OLTED CONNECTIONS AND WELDED CONNECTIONS AND TO PERFORM MATERIAL TESTS AND PREPARE WRITTEN
- C. TESTING AGENCY SHALL CONDUCT AND INTERPRET TESTS. THEY SHALL STATE IN EACH WRITTEN REPORT WHETHER TEST SPECIMENS COMPLY WITH REQUIREMENTS AND SPECIFICALLY STATE AND DEVIATIONS
- D. TESTING AGENCY SHALL PERFORM THE FOLLOWING TESTS: BOLTED CONNECTIONS: INSPECT AND/OR TEST IN ACCORDANCE WITH AISC.
 WELDED CONNECTIONS: INSPECT AND TEST DURING FABRICATION OF STRUCTURAL STEEL ASSEMBLIES AS A. CERTIFY WELDERS AND CONDUCT INSPECTIONS AND TESTS AS REQUIRED. RECORD TYPES AND

LOCATIONS OF DEFECTS FOUND IN WORK. RECORD WORK REQUIRED AND PERFORMED TO CORRECT. PERFORM VISUAL INSPECTION OF ALL WELDS.

PERFORM TESTS OF WELDS AS FOLLOWS. INSPECTION PROCEDURES LISTED ARE TO BE USED AT

- PRODUCTS A. STEEL:
- STRUCTURAL STEEL SHAPES AND PLATES: A992 50ksi STEEL TUBING: ASTM A500, GRADE B (Fy=46 KSI) STEEL PIPE: ASTM A53, TYPE E OR S, GRADE B; OR ASTM A501 4. BOLTS, NUTS, WASHERS (EXCLUDING ANCHOR BOLTS): ASTM A325, TYPE N (UNO), TYPE SC FOR

LIQUID PENETRANT: ASTM E 165

2. ULTRASONIC: ASTM E 164

ANCHOR BOLTS: A307 B. WELD ELECTRODES: E70 AND IN ACCORDANCE WITH AWS.

C. PRIMER: FABRICATOR'S STANDARD RED OXIDE SHOP PRIMER.

CONTRACTOR'S OPTION.

- A. PRIOR TO START OF FABRICATION, FIELD MEASURE AND CONFIRM ALL DIMENSIONS AND DETAILS FOR THE WORK JOINING OR ABUTTING EXISTING STRUCTURES. B. PRIOR TO DELIVERY AND INSTALLATION OF COLUMNS, CONFIRM ADEQUACY OF BASE PLATES TO FIT WITH
- D. SET ALL STEEL STRAIGHT AND PLUMB, PROVIDE ADEQUATE TEMPORARY BRACING, TIE-BACKS, ETC. MAINTAIN STRUCTURAL STEEL ALIGNMENT UNTIL FINISHED WORK IS COMPLETE AND PERMANENT BRACING

WELD AREA. AFTER WELD IS COMPLETE, REMOVE SLAG AND TOUCH-UP PAINT.

WHERE WORK IS TO BE FIELD WELDED, STOP OR REMOVE ALL PAINT, OIL, ETC. WITHIN TWO INCHES OF THE

C. DELIVER AND STORE ALL STEEL TO BE USED IN THE WORK IN A TIMELY, SAFE MANNER. PIECES THAT ARE ALLOWED TO BECOME DAMAGED WILL BE REMOVED FROM THE PROJECT AND REPLACED AT THE

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SPECIAL INSPECTION NOTES:

- 1. THE CONTRACTOR WILL ENGAGE THE SERVICES OF A QUALIFIED SPECIAL INSPECTOR FOR THIS PROJECT, WHO WILL PROVIDE AND/OR COORDINATE INSPECTION AND TESTING REQUIREMENTS AS NECESSARY IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 17 OF THE NYS BUILDING CODE.
- 2. THE ENGINEER HAS PREPARED A STATEMENT OF SPECIAL INSPECTIONS, INCLUDING THE SCHEDULE OF SPECIAL INSPECTIONS, TO BE SUBMITTED WITH THE CONTRACT DOCUMENTS AND THE APPLICATION FOR BUILDING PERMIT TO THE CODE ENFORCEMENT OFFICIAL.
- 3. REFER TO THE SCHEDULE OF SPECIAL INSPECTIONS AND TO THE SPECIFICATIONS FOR REQUIRED SPECIAL INSPECTIONS AND TESTING. SPECIAL INSPECTIONS AND TESTING SHALL BE CONTINUOUS OR PERIODIC DURING THE PERFORMANCE OF THE WORK, AS NOTED.
- 4. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH THE ENGINEER, SPECIAL INSPECTOR, TESTING AGENCY, AND AFFECTED SUBCONTRACTORS TO REVIEW THE REQUIRED SPECIAL INSPECTION AND TESTING REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL DISTRIBUTE CONSTRUCTION SCHEDULES TO EACH ATTENDEE.
- 5. THE SPECIAL INSPECTOR SHALL SUBMIT INTERIM REPORTS AND, AT COMPLETION OF SPECIAL INSPECTIONS, A FINAL STATEMENT OF SPECIAL INSPECTIONS. REPORTS SHALL BE STAMPED AND SIGNED BY A
- 6. THE SPECIAL INSPECTOR SHALL NOTIFY THE CONTRACTOR IMMEDIATELY OF DISCREPANCIES, SUBSEQUENT REPORTS SHALL NOTE WHEN AND HOW DEFICIENCIES WERE CORRECTED. THE SPECIAL INSPECTOR SHALL NOTIFY THE ENGINEER AND THE CODE ENFORCEMENT OFFICIAL OF DISCREPANCIES WHICH HAVE NOT BEEN
- 7. THE CONTRACTOR SHALL COOPERATE WITH THE SPECIAL INSPECTOR INCLUDING ADVANCE NOTIFICATION OF REQUIRED SPECIAL INSPECTION OR TEST, INCIDENTAL LABOR AND SAFE ACCESS TO THE WORK AREAS, AND ACCESS TO THE CONTRACT DOCUMENTS SO THAT INSPECTIONS AND TESTING MAY BE PERFORMED WITHOUT
- 8. THE SPECIAL INSPECTION PROGRAM SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE OBLIGATION TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OR FROM IMPLEMENTING AN EFFECTIVE QUALITY CONTROL PROGRAM.

KEY:

AGENT NO.	INSPECTOR			
1	SPECIAL INSPECTOR			
2	GEOTECHNICAL ENGINEER/INSPECTOR			
3	TESTING/INSPECTING AGENCY			
4	ARCHITECT/ENGINEER			
	KEY OF MINIMUM QUALIFICATIONS OF INSPECTION AGENTS (MQIA)			
PE	PROFESSIONAL ENGINEER			
EIT	ENGINEER IN TRAINING			
ACI	AMERICAN CONRETE INSTITUTE CERTIFIED CONCRETE FIELD TESTING TECHNICIAN			
AWS	AMERICAN WELDING SOCIETY CERTIFIED WELDING INSPECTOR			
ASNT	AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING-LEVEL II OR III			

SOILS AND FOUNDATIONS:

VERIFICATION/INSPECTION	AGENT NO. / MQIA	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1. SOILS a. VERIFY SOIL PREPARATION; REVIEW PROOF ROLLING. b. REVIEW SUBMITTALS FOR FILL MATERIAL. c. VERIFY USE OF FILL MATERIAL AND LIFT THICKNESS IN FIELD d. REVIEW FOOTING BEARING STRATA. e. REVIEW SLAB SUBGRADE AND SUBBASE PREPARATION.		- - - -	x x x x		1704.7.1 1704.7.2 1704.7.2
2. COMPACTION TESTING ONE TEST FOR EACH SPREAD FOOTING, FOR EACH 20-FOOT LENGTH OF STRIP FOOTING, AND FOR EACH 2000 SF OF BUILDING AREA.	3	-	х		1704.7.3
3. MOISTURE CONTENT TESTING OF SLAB SUBBASE. ONE TEST FOR EACH 2000 SF OF BUILDING AREA. MINIMUM OF FOUR TESTS PER AREA.	3	-	Х		ASTM F 1869

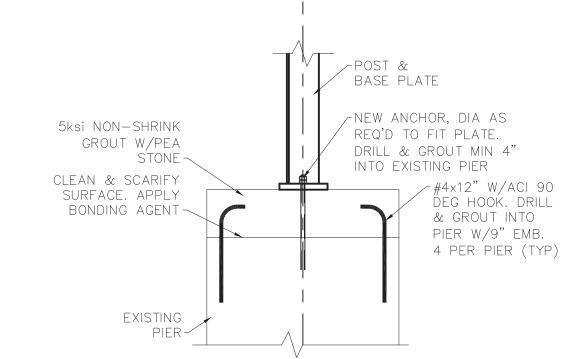
CAST-IN-PLACE CONCRETE:

VERIFICATION/INSPECTION	AGENT NO. / MQIA	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL. a. FOOTINGS AND FROST WALLS. b. RETAINING AND BASEMENT WALLS. c. SLABS ON GRADE AND DECK.	1	- - -	X 25% X 50% X 25%	ACI 318: 3.5, 7.1-7.7	1903.5, 1907.1, 1907.7, 1914.4
2. INSPECT BOLTS AND ANCHOR RODS INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE: a. WHERE ALLOWABLE LOADS HAVE BEEN INCREASED. b. AT COLUMNS IN BRACED FRAMES, MOMENT FRAMES, & WHERE RODS ARE SUBJECT TO SHEAR OR TENSION.	1	X	-		1912.5
3. VERIFYING USE OF REQUIRED DESIGN MIX.	3	X	-	ACI 318: CH. 4, 5.2-5.4	1904, 1905.2, 1905.4, 1914.2, 1914.3
4. SAMPLING FRESH CONCRETE AND PERFORMING SLUMP, AIR CONTENT, UNIT WEIGHT, AND DETERMINING THE TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS.	3/ACI	X	-	ASTM C172 ASTM C31 ACI 318: 5.6, 5.8	1905.6, 1914.10
5. INSPECTION OF CONCRETE FOR PROPER APPLICATION TECHNIQUES.	1 OR 3/ACI	x	_	ACI 318: 5.9, 5.10	1905.9, 1905.10, 1914.6, 1914.7, 1914.8
6. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	1 OR 3/ACI	Х	-	ACI 318: 5.11- 5.13	1905.11, 1905.13, 1914.9
7. SLAB TESTING: a. FLOOR FLATNESS AND LEVELNESS. b. MOISTURE VAPOR EMISSION AND ALKALINITY.	3 3	<u> </u>	X 100% X 100%	ASTM E 1155 ASTM F 1869	

SPECIAL INSPECTIONS

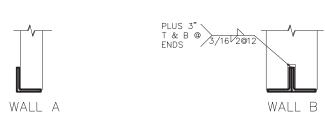
STRUCTURAL STEEL:

VERIFICATION/INSPECTION	AGENT NO. / MQIA	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1. VERIFY THAT FABRICATOR(S) MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES. REVIEW PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.	1	-	×		1704.2
2. MATERIAL VERIFICATION OF HIGH— STRENGTH BOLTS, NUTS, & WASHERS: a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	3	-	X 100%	APPLICABLE ASTM MATERIAL SPECIFICATIONS; AISC ASD, A3.4; AISC LRFD, A3.3	
 INSPECTION OF HIGH-STRENGTH BOLTING: a. BEARING-TYPE CONNECTIONS. b. SLIP-CRITICAL CONNECTIONS. 	3 3	_ X	X 100%	AISC LRFD SECTION M2.5	1704.3.3
4. MATERIAL VERIFICATION OF STRUCTURAL STEEL: a. IDENTIFICATION MARKING TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	3	-	X 100%	ASTM A 6 OR ASTM A568	1708.4
 MANUFACTURER'S CERTIFIED MILL TEST REPORTS REQUIRED. 	1	_	X 100%	ASTM A 6 OR ASTM A568	
5. PERFORM PULL—OUT TESTS ON DRILLED—IN ANCHORS. a. TEST 10% OF ANCHORS TO LOAD OF 50% OF ALLOWABLE PULL—OUT STRENGTH. b. TEST 100% OF ANCHORS BY PULLING WITH HAMMER.	3	-	X		
6. MATERIAL VERIFICATION OF WELD FILLER MATERIALS: a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED DOCUMENTS. b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	3/AWS 1	-	X (DURING WELD INSPECTION)	AISC, ASD, A3.6; AISC, LRFD, A3.5	
7. INSPECTION OF WELDING: a. STRUCTURAL STEEL 1. COMPLETE & PARTIAL PENETRATION GROOVE WELDS. 2. MULTI-PASS FILLET WELDS. 3. SINGLE-PASS FILLET WELDS>1/6". 4. SINGLE-PASS FILLET WELDS>1/6". 5. FLOOR AND DECK WELDS & SHEAR CONNECTOR WELDS.	3/AWS 3/AWS 3/AWS 3/AWS 3/AWS	X X X - -	- - X 100% X 100%	AWS D1.1	1704.3.1
8. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED DOCUMENTS. a. DETAILS SUCH AS BRACING & STIFFENING. b. MEMBER LOCATIONS. c. APPLICATION OF JOINT DETAILS AT CONNECTIONS.	1/PE 1 1	Т	X 100%		1704.3.2
9. INSPECT CONDITION OF ERECTED MATERIALS.	1 AND 3	-	X 100%		1704.2
10. VERIFY COLUMN PLUMBNESS & SPLICES.	3	_	X 100%		



1 SUPPORT FOR STAIR POST

STEEL LINTEL SCHEDULE			
	WIDTH OF MASONRY OPENING		
WALL THICKNESS & TYPE	UP TO 4'-0"	4'-1" TO 8'-0"	
	MIN 4" BRG EACH END	MIN 8" BRG EACH END	
4" - WALL A (30 psf)	L4×4× ³ / ₈	L6×4× ³ / ₈ LLV	
6" - WALL A (45 psf)	L6×4× ³ / ₈ LLH	L6×6× ³ / ₈	
6" - WALL B (45 psf)		WT7×13	
8" - WALL B (65 psf)	DBL L3½x3½x3/8	DBL L4x3½x¾ LLV	
10" - WALL B (75 psf)	DBL L4×4×3/8	DBL L4×4× ³ /8	
12" - WALL B (90 psf)	DBL L5x5x ³ / ₈	DBL L5x5x ³ %	



1. IN EXISTING WALLS:

- 1.1. THE EXISTING MASONRY AND LINTEL SHALL BE REMOVED CAREFULLY WITH HAND TOOLS ONLY.
- 1.2. NEW LINTELS SHALL BE INSTALLED AS SOON AS THE EXISTING LINTEL IS REMOVED AND THE MASONRY SHALL BE REPAIRED TO PROVIDE FULL BEARING OF THE WALL ON THE LINTEL.
- 1.3. WHERE EXISTING WALL IS MULTIPLE WYTHES OF STANDARD BRICK, THE LINTEL CAN BE REPLACED AS MULTIPLE 4" WALLS OR 8" WALLS.
- 1.4. EACH LINTEL SHALL BEAR ON THE EXISTING WALL WITH THE BEARING LENGTHS NOTED ABOVE.
- 1.5. AT THE ARCHITECTS DISCRETION, WHERE THE INSIDE FACE OF THE WALL WILL BE FINISHED, THE NEW LINTEL ANGLE MAY BE ON THE EXPOSED FACE OF THE WALL. 2. ABOVE TABLE IS FOR STEEL LINTELS IN NON-LOAD BEARING WALLS.
- 3. ALL EXTERIOR LINTELS SHALL BE GALVANIZED AFTER FABRICATION. FINISH PAINT, COLOR, ETC. PER ARCHITECT
- 4. CORES BELOW BEARING POINTS SHALL BE GROUTED SOLID FOR FULL HEIGHT & 5. DO NOT LOCATE CONTROL OR ISOLATION JOINTS ABOVE LENGTH OF THE LINTEL.



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Peekskill City School District Peekskill, New York

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